INTERNATIONAL APPRAISAL COMPANY, INC.

INTERNATIONAL APPRAISAL COMPANY

April 11, 1978

Mr. David L. Harris
Manager, Property Taxes
THE ANACONDA COMPANY
660 Bannock Street
Denver, Colorado 08024

Re: Aluminum Reduction Works
Columbia Falls, Montana

Dear Mr. Harris:

Pursuant to your request, we submit an appraisal report relative to this property. A personal inspection of the real estate and of local conditions has been made by members of our staff with analyses of all relevant data being utilized in determining the estimate of market value.

The following report, including exhibits, fully describes the method of approach and contains all pertinent data gathered in our investigation of the subject.

After careful consideration, we have concluded that the fair market value of the subject property as of January 1, 1978, is:

TEN MILLION DOLLARS

($10,000,000)

We certify that we have no present or contemplated future interest in the subject property and that our employment and compensation are in no way contingent upon the value reported.

Reviewed and Approved By:

Paul D. Roberts, C.T.A.
Senior Vice President

Respectfully submitted,

Richard A. Kulman
I.F.A.S., C.R.A.
Senior Appraiser

Joseph P. Rich
Senior Appraiser

PDR/RAK/JPR/dlm
Enclosure

cc: Mr. Norman W. Proctor

INTERNATIONAL APPRAISAL COMPANY

April 11, 1978

Mr. Norman W. Proctor
Manager, Compliance and
Administration
THE ANACONDA COMPANY
1271 Avenue of the Americas
New York, New York 10020

Re: Aluminum Reduction Works
Columbia Falls, Montana

Dear Mr. Proctor:

Pursuant to your request, we submit an appraisal report relative to this property. A personal inspection of the real estate and of local conditions has been made by members of our staff with analyses of all relevant data being utilized in determining the estimate of market value.

The following report, including exhibits, fully describes the method of approach and contains all pertinent data gathered in our investigation of the subject.

After careful consideration, we have concluded that the fair market value of the subject property as of January 1, 1978, is:

TEN MILLION DOLLARS

($10,000,000)

We certify that we have no present or contemplated future interest in the subject property and that our employment and compensation are in no way contingent upon the value reported.

Reviewed and Approved By:

Paul D. Roberts, C.T.A.
Senior Vice President

Respectfully submitted,

Richard A. Kulman
I.F.A.S., C.R.A.
Senior Appraiser

Joseph P. Rich
Senior Appraiser

PDR/RAK/JPR/dlm
Enclosure

cc: Mr. David L. Harris

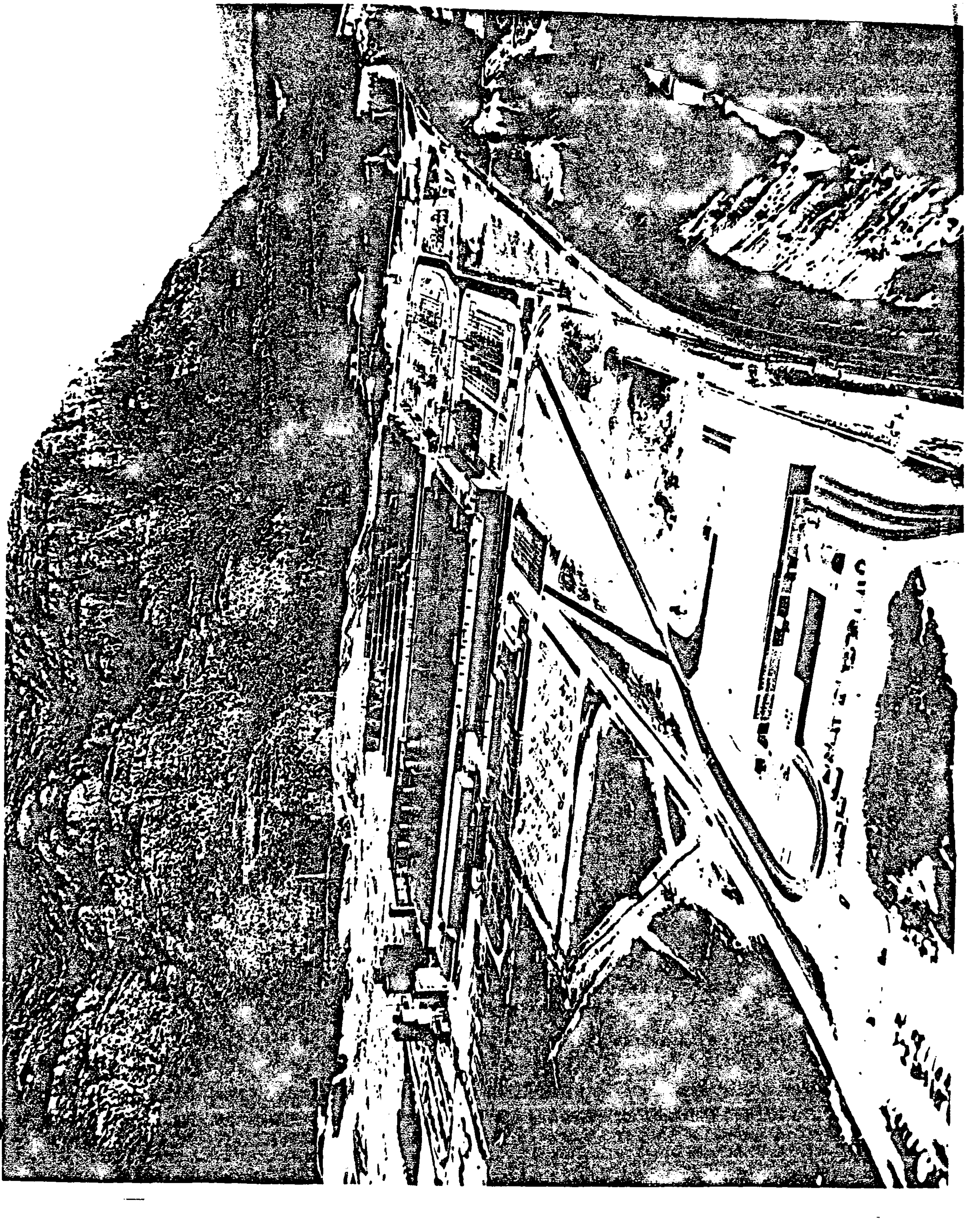


TABLE OF CONTENTS

A D D E N D A

SUMMARY OF SALIENT FACTS AND CONCLUSIONS

Subject:	The Anaconda Company Aluminum Reduction Plant Columbia Falls, Montana	
Tax Reference:	No. 0003022 Account No. 0014400 School District No. 06	
Land Area:	289± Acres	
Improvements:	A 2,653,249 square foot industrial complex consisting of 44 major building structures designed for manufacturing, storage and office usage. The improvements were built over a period of 23 years from 1954 to 1977.	
Appraisal Date:	January 1, 1978	
Value Indications:	Cost Approach	$10,851,000
	Income Approach	$10,393,000
	Market Data Approach	$ 9,977,000
Concluded Value:	$10,000,000	
Allocated:	Land	$ 347,000
	Improvements	9,653,000
	Total	$10,000,000

PURPOSE OF APPRAISAL

The appraisal was made for the purpose of estimating the market value of the subject property, including land and improvements, as of January 1, 1978.

PROPERTY RIGHTS APPRAISED

The property rights appraised are all rights existing in fee simple as of the appraisal date. These rights are the legal and economic properties of the owner that may rightfully be exchanged for money or equivalent goods. Property rights inherent in the ownership of tangible personal property, and intangible benefits of the property itself, are not the subject of this report.

MARKET VALUE

Market value is "the highest price in terms of money which a property will bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus.

Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

1. buyer and seller are typically motivated;
2. both parties are well informed or well advised, and each acting in what he considers his own best interest;
3. a reasonable time is allowed for exposure in the open market;
4. payment is made in cash or its equivalent;
5. financing, if any, is on terms generally available in the community at the specified date and typical for the property type in its locale;
6. the price represents a normal consideration for the property sold unaffected by special financing amounts and/or terms, services, fees, costs, or credits incurred in the transaction."[1]

[1]The American Institute of Real Estate Appraisers and The Society of Real Estate Appraisers, Real Estate Appraisal Terminology, Cambridge, Massachusetts, c. 1975, p. 137.

CONTINGENT AND LIMITING CONDITIONS

The appraisers assume no responsibility for matters legal in character, nor renders any opinion as to the title, which is assumed to be good. The legal description, if any furnished, is assumed to be correct. All existing liens and encumbrances have been disregarded and the property is appraised as though free and clear under responsible ownership and competent management.

The appraisers relied primarily on the Factory Insurance Association's plot plan drawing for building dimensions. The accuracy of the Factory Insurance layout was checked with Factory Insurance personnel who conducted the survey. It was also checked against various plot plan and individual building drawings furnished by Anaconda. A final "spot-check" was made by physically measuring several of the buildings.

Verification of factual matters contained in this report, has been made to the extent deemed practicable. The appraisers certify, that to the best of their knowledge and belief, such factual matters are true and correct and that no important factors affecting the value of this property were knowingly overlooked or withheld. Market data has been taken from sources deemed to be reliable. The resultant estimate of market value is predicated on the financial structure prevailing as of the date of value.

This appraisal report sets forth all of the limiting conditions (imposed by the terms of the assignment or by the undersigned) affecting the analysis, opinions and conclusions contained in this report.

Possession of this report, or a copy thereof, does not carry with it the right of publication, nor may all or any part of the contents of this report be conveyed to the public through advertising, public relations, news, sales or other media, without written consent and approval of the authors, particularly as to the value conclusions, and the identity of the appraisers or firm with which they are connected.

CONTINGENT AND LIMITING CONDITIONS (Continued)

The distribution of the total valuation in this report between land and improvements applies only under the existing program of utilization. The separate valuations for land and building must not be used in conjunction with any other appraisal and are invalid if so used.

The appraisers shall not be required to give testimony or appear in court by reason of this appraisal, unless specific arrangements for these services are otherwise arranged.

This appraisal report has been made in conformity with and is subject to the Code of Professional Ethics and Standards of Professional Conduct of the American Institute of Real Estate Appraisers of the National Association of Realtors, the National Association of Independent Fee Appraisers and the American Society of Appraisers.

THE APPRAISAL PROCESS

An appraisal is an estimate of value. In order to arrive at this estimate the appraiser follows an orderly procedure by which the appraisal problem is defined; the work necessary to solve the problem is planned; and the data involved is acquired, classified, analyzed, interpreted and translated into an estimate of value. This entire procedure is referred to as the appraisal process.

In determining the value estimate of a parcel of real estate the appraisers consider three separate but interrelated approaches to value. These are the Cost, Income and Market Data Approaches. In the Cost Approach the appraisers estimate either the reproduction cost-new or the replacement cost-new of the improvements and then deduct accrued depreciation (physical deterioration, functional and economic obsolescence) to arrive at a depreciated cost to which is added the value of the land.

In the Income Approach the appraisers first determine the gross potential income for the property from which are deducted allowances for vacancy and credit losses as well as operating expenses in order to arrive at a net income. This net income is then converted into value through a process known as capitalization.

The Market Data Approach is primarily a comparative method whereby the appraisers extract from the market similar properties that have sold. These properties or comparables are then adjusted to the subject and a final interpretation is then made in order to arrive at a value for the subject. Since the Market Data Approach is based upon the reaction of informed buyers and sellers, it is this methodology that is used to ascertain the various components in both the Cost and Income Approaches.

Only under optimum conditions when all factors affecting value are in balance will the value estimates arrived at by the three approaches coincide. Under normal market conditions the values arrived at by one or even two approaches will be more significant than the value arrived

THE APPRAISAL PROCESS (Continued)

at by the others. Unless the appraisers are dealing with a special-purpose property which makes the use of one or two of the approaches impractical it is pertinent that all three approaches be utilized as each approach acts as a check and balance on the others. When the value estimate under each of the approaches has been determined the appraisers then correlate them and give greatest credence to that approach which most accurately reflects the value of the property.

LEGAL DESCRIPTION

For the purpose of this report, we shall identify the land under review by means of the tax assessment property description. The true legal descriptions for all the parcels involved are of such volume that it is impracticable to attempt to include them in this section of our report.

Reduction Plant Site

Parcel No. 1				Number 0003022
SW4N4, NW4SW4	02	30	20	School District 06
				Account No. 0014400
Parcel No. 2				
S2NE4, N2SE4 Less RW	03	30	20	
Parcel No. 3				
NE4SW4, Less RW	03	30	20	
Parcel No. 4				
Alum. Plant 2TR 6A	03	20	20	

ZONING

The plant site is not located within the existing planning and zoning area now covered by the present existing code. However, the City-County Planning Commission is actively preparing an overall master plan or code which it hopes to have ready for approval shortly. At present, someone contemplating a sizable improvement would have to meet with the City-County Officials in order to discuss the project's merits and the availability of the full range of utility services. In most cases, a sizable project would require the expansion of existing utilities.

AREA DATA

Columbia Falls, situated in central Flathead County is located in northwest Montana within the Flathead Valley. Bordering the Valley on the east are the Rocky Mountains and Glacier National Park. To the south is Flathead Lake, one of the largest bodies of fresh water west of the Mississippi River.

The Flathead Valley is accessible by rail and/or highway. Rail service is provided by the Burlington Northern Railway Company. The main east-west line of the Burlington Northern passes through Whitefish and Columbia Falls in the northern portion of the Valley. Amtrak furnishes passenger service with daily stops from east and west of Whitefish. Freight service is provided to Kalispell and Somers over a branch line extending south from Columbia Falls.

Kalispell is intersected by two primary U.S. Highways. U.S. 93 is a major north-south route which traverses the Valley. It extends from Mexico to Alaska. U.S. Highway 2 is a major transcontinental highway which crosses the northern section of the country.

Flathead County is experiencing a marked surge in the rate of population growth. The county population has increased by twenty (20%) percent in the decade between the 1960 and 1970 Census. Current data indicates that the county population is growing by approximately 1,500 persons per year. It appears evident that barring a major economic recession, the county population will surpass 50,000 persons prior to the end of 1978 and should reach about 55,000 before the end of the decade and the 1980 Census. The primary factor that serves to constrain an even larger increase in population growth, is the shortage of full-time non-seasonal jobs. Additional industrial development would expand the economic base and provide the impetus to greatly accelerate the rate of population growth.

A high rate of unemployment has long plagued the economy of Flathead County. Historically, this has been due largely to the seasonal nature of such sectors as agriculture, the timber industry, and the

AREA DATA (Continued)

effect of seasonal tourism on retail trade and services. More recently, growth of the total civil labor force, as a result of the secondary family worker and population growth has exceeded the growth of the employed labor force. This factor has also added to unemployment. While certain unique factors, such as an abnormally high rate of unemployment, effect the local economy, local conditions are also largely a reflection of the national and regional situations. Nation-wide inflation, recession and energy shortages directly affect the local economy.

The trend locally is toward large farms, with the small acreage farm falling by the wayside. The trend, coupled with the conflicting land use demands will probably result in a slight reduction of the farm land base. There appears to be no relief in sight for high prices. These factors together suggest the agricultural sector will probably remain about "status quo" in terms of employment, while earnings should increase in the long run, although yearly fluctuations will occur. This trend is unlikely to have a significant impact on other sectors of the local economy, and certainly offers no solution to the unemployment dilemma.

Manufacturing has steadily grown to the largest sector in terms of earnings and employment in the county. Wood products represent fifty-five (55%) percent of that employment and primary metals (aluminum) twenty-eight (28%) percent. Since 1977, there has been expansion of both portions, particularly the fiberboard plant constructed in 1973 and 1974 by Plumb Creek Lumber Company.

The primary metals segment of the manufacturing sector is subject to weather conditions that affect electric power availability, but a recent economic study foresees continuation of a major rate in the local economy:

AREA DATA (Continued)

> "It is recognized that the aluminum industry is subject to change in technological innovations, in sources and costs of supplies and in competition from other materials. Unless general cost-price relationships within the industry, as well as those in this particular plant change appreciably, it appears reasonable to expect the Anaconda Aluminum Reduction Plant to continue its sizeable contribution to the Flathead County economy."

In summary, the manufacturing sector has shown signs of saturation as evidenced by increased unemployment, combined with restricted industrial expansion as a result of the past recession and continued inflation.

It is an obvious conclusion that if population estimates are correct, an increase in primary employment will have to occur. This essentially means industrial expansion. If the population does increase as estimated and a current level of unemployment continues, industry would not have to play a greater role, but would have to expand somewhat even to remain "status quo" in the economy. If population estimates are correct, and a stable (normal) unemployment rate is to be reached, expansion of the manufacturing sector beyond current capabilities would be necessary.

Recent trends tend to indicate that industrial expansion and unemployment have remained somewhat stable and the estimated population growth, as anticipated, will not take place.

HIGHEST AND BEST USE

Highest and Best Use is defined by these appraisers as the most likely use for which there is a current market and which may be reasonably expected to provide the greatest net return over a given period of time.

The subject is situated ouside of a zoning district and represents the only major usage in the area aside from lumber, forestry and agricultural uses.

The site is not adjacent to or within close proximity to any interstate or limited access highways, but it is served by rail which is the major form of industrial transportation. Further, ample, but interruptable power serves the site and the needs of the present user at this point in time; however, major curtailments are expected to become a reality in the foreseeable future.

In view of the economic and physical character of the area's industrial usage, in one form or another, represents the only production use to which the site could be used, either now or in the forseeable future. Also, conversion of the structures to uses other than industrial would be both too costly and uneconomical. Therefore, the Highest and Best Use of the site is for its present use as an industrial facility.

LAND EVALUATION

Primary to the appraisal of a property is an analysis of the land evaluation. Although land and buildings are physically joined and most market sales and rental data of heavy industrial properties is for land and buildings combined, it is nevertheless required that a separate land value be allocated for the subject. This is necessary in the Cost Approach and in certain capitalization techniques in the Income Approach where land and building values are separated.

Although the land value is an allocation of the total property value and the overriding concern is, therefore, the value of the land and buildings combined, the comprehension of the appraisal problem generally becomes easier when the contributions of land and buildings to the total value are realized.

The method most often used in determining the land value is a direct comparison of the subject site with recent comparable sales of vacant land.

In establishing a unit value for the subject parcel consisting of an overall 289± acres, an investigation was made in the vicinity of the subject in search of large industrial land sales having similar characteristics to the subject.

The following pages contain data relative to sales of industrial land in the Columbia Falls area.

LAND EVALUATION (Continued)

Comparable Land Sale No. 1

Address:	Northeast Corner of Aluminum Road and North Fork Road
Date:	October, 1971
Grantor:	Anaconda Company
Grantee:	Robert Balahiser
Sale Price:	$9,600
Land Area:	32 Acres
Sale per Unit of Area:	$300 per Acre
Comments:	Being Improved with Residentials

LAND EVALUATION (Continued)

Comparable Land Sale No. 2

Address:	Section 20, Township 30, Range 20 166 Feet from Intersection County Road, Kinsey Property
Date:	June, 1973
Grantor:	Gerald Gifford
Grantee:	Max Staheli
Sale Price:	$10,000
Land Area:	Ten Acres
Sale per Unit of Area:	$1,000 per Acre
Comments:	Being Improved With Farming

LAND EVALUATION (Continued)

Comparable Land Sale No. 3

Address:	Section 20, Township 30, Range 20 166 feet from intersection County Road, Kinsey Property, adjacent to Staheli Property.
Date:	June, 1973
Grantor:	Gerald Gifford
Grantee:	Jerry Vicks
Sale Price:	$10,000
Land Area:	Ten Acres
Sale per Unit of Area:	$1,000 per Acre
Comments:	Being Improved With Residentials

LAND EVALUATION (Continued)

Comparable Land Sale No. 4

Location:	Columbia Falls, Montana
Date:	June 18, 1975
Grantor:	Dehlbom Estate
Grantee:	Anaconda Company
Sale Price:	$200,000
Area:	160 acres
Unit Price:	$1,250
Comments	Purchased as a result of a law suit. Grantor assumed life estate.

LAND EVALUATION (Continued)

Comparable Land Sale No. 5

Location:	Columbia Falls, Montana
Date:	November 19, 1974
Grantor:	Weiner & Knapp
Grantee:	Anaconda Company
Sale Price:	$20,000
Area:	32.57 acres
Unit Price:	$614
Comments:	Adjacent to Anaconda property

LAND EVALUATION (Continued)

Sale No.	Date of Sale	Land Area Acres	Sale Price	Unit Price
1	10/71	32	$ 9,600	$ 300
2	6/73	10	10,000	1,000
3	6/73	10	10,000	1,000
4	6/75	160	200,000	1,250
5	11/74	32.57	20,000	614

Sales Analysis

We have researched the preceding land sales, located within the general area of the subject; and adjustments were made by these appraisers as to time lapse, access to public roads, location, general utility, and zoning restrictions, if any. Since the subject property is rather large and obviously spans the spectrum of rear, non-access kind to ready-access road frontage, your appraisers have elected to utilize an overall unit price per acre in order to arrive at our final land value. The overall unit price per acre is $1,200.

Therefore:

289± acres x $1,200 per acre =	$346,800
Indicated Land Value:	$346,800
Rounded To:	$347,000

COST APPROACH

One of the major approaches to value is the Cost Approach which is based upon the proposition that the cost to reproduce or replace is an indication of value. Inherent to this approach is the principle of substitution which holds that no person will pay more for a property than the amount for which he can obtain, by purchase of a site and construction of a building, without undue delay, a property of equal desirability and utility.

In application of the Cost Approach the appraiser first estimates either the reproduction cost-new or the replacement cost-new of all improvements. He then estimates in dollars the varying amounts of accrued depreciation which is comprised of physical deterioration, functional obsolescence and economic obsolescence. The total depreciation is subtracted from the reproduction cost-new or the replacement cost-new estimate in order to arrive at a depreciated cost estimate. The depreciated cost estimate is then added to the land value to arrive at a total indicated value.

Following the description of the improvements is a cost analysis of the subject. In determining these improvement costs the appraisers have utilized the nationally accepted pricing manuals, such as Marshall and Swift's Marshall Valuation Service, R. S. Mean's Building Construction Cost Data and the Dodge Building Cost Calculation and Valuation Guide in connection with current cost pricing developed by the engineering staff of International Appraisal Company, Incorporated.

Subsequent to this will be an analysis of accrued depreciation and lastly the land value will be added to the depreciated cost to arrive at a final estimate of value under the Cost Approach.

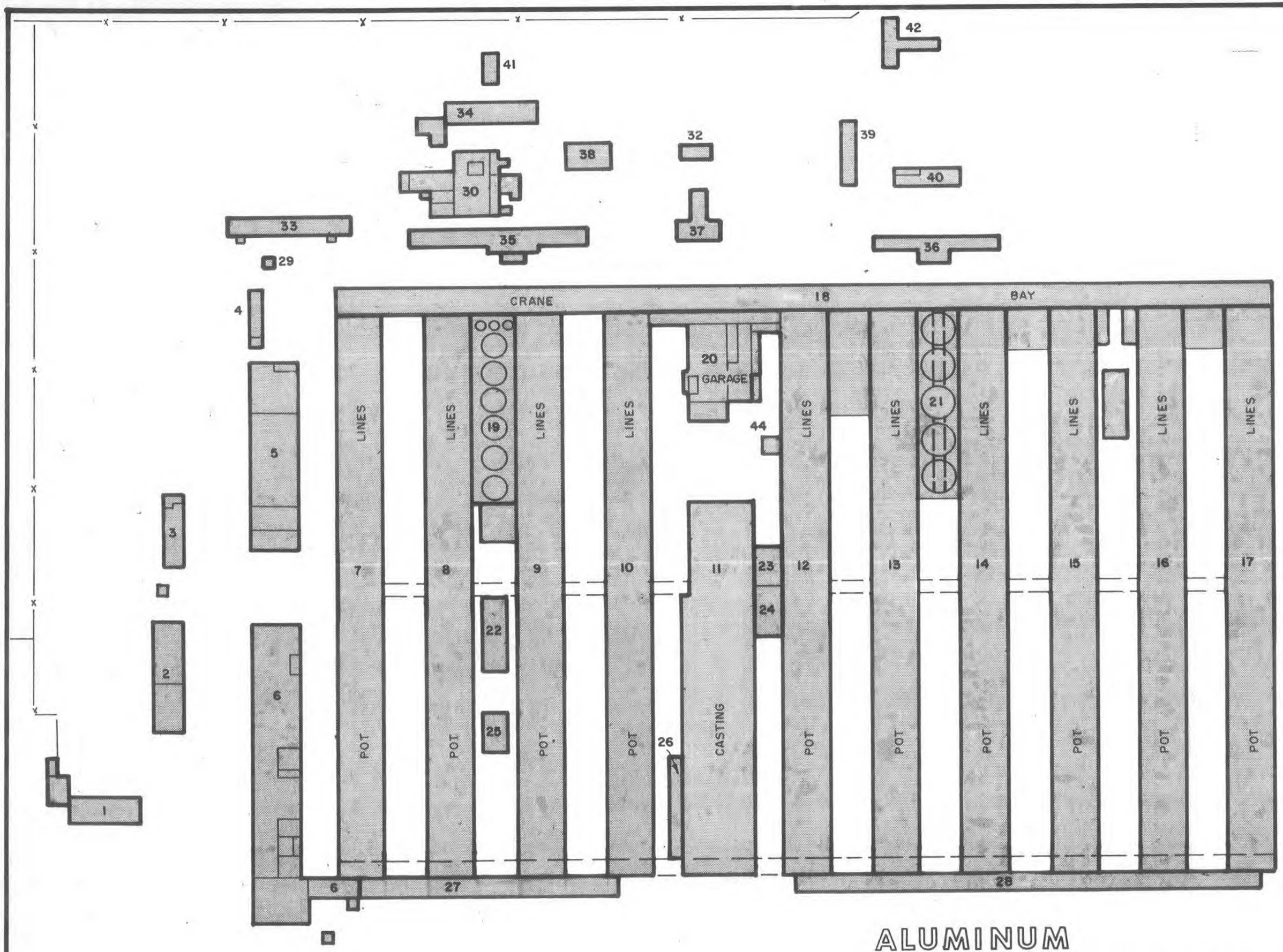
COST APPROACH (Continued)

Description of Improvements

The site is improved with 43 major building structures and 70 yard buildings that were primarily designed for the manufacture of aluminum. The structures vary in construction, design and quality having been built in three stages from 1954 to 1967. Subsequent to original construction, modifications have been made to a number of the buildings in the form of additions and extensions although some structures have been demolished.

A separate description page is included for each of the building structures. However, in order to fully comprehend the layout, design and location of each of the buildings the reader is first directed to the following site plan of the property.

23 A



LEGEND

INDICATES BUILDINGS

28 INDICATES BUILDING NOS.

ALUMINUM

THE ANACONDA COMPANY

REDUCTION PLANT

COLUMBIA FALLS, MONTANA

INTERNATIONAL APPRAISAL COMPANY
11-15 RIVER ROAD, FAIR LAWN, N.J.
APRIL 1978 NO SCALE

COST APPROACH (Continued)

Description of Improvements

Building No. 1

Type:	One story, part basement, brick, cement block and protected metal
Use:	Administrative and engineering offices
Built:	1954-1974
Area:	13,381 square feet
Foundation:	Concrete
Walls:	Brick, cement block, and asbestos protected metal
Roof:	Built up on fiberglass on steel deck on steel
Frame:	Steel
Floors:	Concrete, composition covering
Heating:	Central gas fired
Lighting:	Fluorescent
Plumbing:	Miscellaneous - good lavatory fixtures
Sprinklers:	None
Partitions:	Cement block, frame dimension, steel & glass

COST APPROACH (Continued)

Reproduction Cost - Building 1

Excavation and Foundation	$ 7,840
Exterior Walls	43,497
Roof Structure	32,204
Roof Cover	8,990
Frame	25,884
Floor Structure	18,595
Floor Covering	6,471
Ceiling	15,021
Interior Components	9,673
Heating, Ventilation and Air Conditioning	31,407
Electrical and Lighting	18,549
Power Wiring	6,660
Plumbing	19,573
Total Reproduction Cost New	$244,364

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 2

Type:	One story, part basement, brick structure
Use:	Change house
Built:	1954 and 1968
Area:	14,780 square feet
Foundation:	Concrete
Walls:	Brick, part aluminum panels
Roof:	Flat, built up on metal deck on steel
Frame:	Steel
Floors:	Concrete, tile and composition tile covering
Heating:	Central steam
Lighting:	Incandescent and fluorescent
Plumbing:	Standard
Sprinklers:	None
Partitions:	Cement block and tile, glass and steel

COST APPROACH (Continued)

Reproduction Cost - Building 2

Excavation and Foundation	$ 9,267
Exterior Walls	57,768
Roof Structure	53,226
Roof Cover	11,707
Frame	30,666
Floor Structure	20,645
Floor Covering	11,541
Ceiling	11,297
Interior Components	6,565
Heating, Ventilation and Air Conditioning	14,198
Electrical and Lighting	15,267
Plumbing	10,381
Total Reproduction Cost New	$252,528

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 3

Type:	One story brick building
Use:	Laboratory
Built:	1954 and 1966
Area:	6,880 square feet
Foundation:	Concrete
Walls	Part brick, part glass block, part aluminum panels
Roof:	Flat, built up tar and gravel on steel deck on steel
Frame:	Load bearing walls, some steel
Floors:	Concrete, ceramic, terra cotta and composition tile covered
Heating:	Gas fired space heaters
Lighting	Fluorescent and incandescent
Plumbing:	Standard
Sprinklers:	Throughout
Partitions:	Block and tile, glass and steel and frame dimension

COST APPROACH (Continued)

Reproduction Cost - Building 3

Excavation and Foundation	$ 4,863
Exterior Walls	27,451
Roof Structure	21,412
Roof Cover	6,431
Frame	3,216
Floor Structure	8,784
Floor Covering	12,553
Ceiling	7,294
Interior Components	43,922
Heating, Ventilation and Air Conditioning	6,902
Electrical and Lighting	15,922
Power Wiring	9,000
Plumbing	24,549
Sprinklers	7,765
Total Reproduction Cost New	$200,064

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 4

Type:	One story aluminum sided
Use:	Heavy equipment storage
Built:	1965
Area:	3,186 square feet
Foundation:	Concrete
Walls:	Aluminum panel
Roof:	Aluminum panel on steel trusses
Frame:	Steel
Floors:	Concrete
Heating:	Space heaters
Lighting:	Incandescent
Plumbing:	Minimal
Sprinklers:	None

COST APPROACH (Continued)

Reproduction Cost - Building 4

Excavation and Foundation	$ 2,587
Exterior Walls	11,642
Roof Structure	11,318
Roof Cover	5,035
Frame	8,223
Floor Structure	4,804
Interior Components	554
Heating, Ventilation and Air Conditioning	1,478
Electrical and Lighting	1,894
Plumbing	647
Total Reproduction Cost New	$48,182

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 5

Type:	One story light industrial
Use:	Warehouse and lunchroom
Built:	1954
Area:	33,488 square feet
Foundation:	Concrete
Walls:	Corrugated iron
Roof:	Corrugated iron on fiberglass on steel trusses
Frame:	Steel
Floors:	Concrete, composition tile in office and lunchroom areas
Heating:	Central steam, air conditioning in office area
Lighting:	Incandescent and fluorescent
Plumbing:	Standard
Sprinklers:	Throughout
Partitions:	Cement block, plaster

COST APPROACH (Continued)

Reproduction Cost - Building 5

Excavation and Foundation	$ 23,023
Exterior Walls	50,651
Roof Structure	116,371
Roof Cover	33,907
Frame	76,185
Floor Structure	43,534
Floor Covering	539
Ceiling	858
Interior Components	5,442
Heating, Ventilation and Air Conditioning	39,832
Electrical and Lighting	26,790
Plumbing	6,698
Sprinklers	29,302
Total Reproduction Cost New	$453,132

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 6

Type:	One story "L" shaped industrial building
Use:	Mechanical, maintenance, instrument and carpenter shops
Built:	1954
Area:	58,648 square feet
Foundation:	Concrete
Walls:	Corrugated iron
Roof:	Corrugated iron on steel
Frame:	Steel
Floors:	Concrete, some brick and composition tile
Heating:	Space heaters
Lighting:	Incandescent, fluorescent and mercury vapor
Plumbing:	Standard
Sprinklers:	Carpenter shop only
Partitions:	Brick, cement block, sheetrock on steel
Miscellaneous:	Overhead craneway for: 1 25-ton crane 1 10-ton crane 3 5-ton cranes 1 2-ton crane

COST APPROACH (Continued)

Reproduction Cost - Building 6

Excavation and Foundation	$ 45,299
Exterior Walls	92,435
Roof Structure	200,896
Roof Cover	87,005
Frame	186,319
Floor Structure	87,241
Floor Covering	5,824
Ceiling	7,033
Interior Components	14,616
Heating, Ventilation and Air Conditioning	43,726
Electrical and Lighting	70,420
Plumbing	9,054
Sprinklers	5,725
Total Reproduction Cost New	$855,593

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 7

Type:	One story and basement industrial building
Use:	Aluminum reduction
Built:	1954
Area:	204,360 square feet including 101,220 square feet of basement
Foundation:	Reinforced concrete
Walls:	Protected metal
Roof:	Protected metal - monitor
Frame:	Protected metal
Floors:	Reinforced concrete
Heating:	None
Lighting:	Mercury vapor, sodium vapor and incandescent
Plumbing:	None
Sprinklers:	None
Craneway:	Overhead
Passageways:	Two above grade and one in basement to Building 8

COST APPROACH (Continued)

Reproduction Cost - Building 7

Excavation and Foundation	$ 100,863
Exterior Walls	196,672
Roof Structure	342,453
Roof Cover	188,341
Frame	519,281
Floor Structure	491,408
Electrical and Lighting	56,603
Basement	1,007,816
Total Reproduction Cost New	$2,903,437

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 8

Type:	One story and basement industrial building
Use:	Aluminum reduction
Built:	1954
Area:	204,520 square feet including 105,040 square feet of basement
Foundation:	Reinforced concrete
Walls:	Protected metal
Roof:	Protected metal - monitor
Frame:	Protected metal
Floors:	Reinforced concrete
Heating:	None
Lighting:	Mercury vapor, sodium vapor and incandescent
Plumbing:	None
Sprinklers:	None
Craneway:	Overhead
Passageways:	Two above grade and one in basement to Building 9

COST APPROACH (Continued)

Replacement Cost - Building 8

Excavation and Foundation	$ 100,965
Exterior Walls	196,417
Roof Structure	342,748
Roof Cover	188,593
Frame	519,614
Floor Structure	491,632
Electrical and Lighting	57,152
Basement	1,007,816
Total Reproduction Cost New	$2,904,937

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 9

Type:	One story and basement industrial building
Use:	Aluminum reduction
Built:	1954
Area:	204,520 square feet including 105,060 square feet of basement
Foundation:	Reinforced concrete
Walls:	Protected metal
Roof:	Protected metal - monitor
Frame:	Protected metal
Floors:	Reinforced concrete
Heating:	None
Lighting:	Mercury vapor, sodium vapor and incandescent
Plumbing:	None
Sprinklers:	None
Craneway:	Overhead
Passageways:	Two above grade and one in basement to Building 10

COST APPROACH (Continued)

Reproduction Cost - Building 9

Excavation and Foundation	$ 100,965
Exterior Walls	196,417
Roof Structure	342,748
Roof Cover	188,593
Frame	519,614
Floor Structure	491,632
Electrical and Lighting	57,152
Basement	1,007,816
Total Reproduction Cost New	$2,904,937

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 10

Type:	One story and basement industrial building
Use:	Aluminum reduction
Built:	1954
Area:	196,632 square feet including 97,380 square feet of basement
Foundation:	Reinforced concrete
Walls:	Protected metal
Roof:	Protected metal - monitor
Frame:	Protected metal
Floors:	Reinforced concrete
Heating:	None
Lighting:	Mercury vapor, sodium vapor and incandescent
Plumbing:	None
Sprinklers:	None
Craneway:	Overhead
Passageways:	One above grade to Building 11

COST APPROACH (Continued)

Reproduction Cost - Building 10

Excavation and Foundation	$ 97,390
Exterior Walls	194,360
Roof Structure	334,688
Roof Cover	182,032
Frame	503,280
Floor Structure	474,893
Electrical and Lighting	55,192
Basement	973,897
Total Reproduction Cost New	$2,815,723

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 11

Type:	High one-story sectioned industrial structure
Use:	Aluminum casting
Built:	1954 with additions
Area:	96,450 square feet
Foundation:	Reinforced Concrete
Walls:	Corrugated metal
Roof:	Corrugated metal
Frame:	Steel
Floors:	Concrete on ground with interior rail siding
Heating:	Space heaters
Lighting:	Mercury vapor, sodium vapor and incandescent
Plumbing:	Standard
Sprinklers:	None
Passageway:	In center of building to Building 12

COST APPROACH (Continued)

Reproduction Cost - Building 11

Excavation and Foundation	$ 100,435
Exterior Walls	192,086
Roof Structure	516,715
Roof Cover	151,550
Frame	536,428
Floor Structure	166,291
Enterior Components	17,963
Heating, Ventilation and Air Conditioning	44,215
Electrical and Lighting	57,003
Plumbing	19,344
Total Reproduction Cost New	$1,802,030

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 12

Type:	One story and basement industrial building
Use:	Aluminum reduction
Built:	1965
Area:	199,378 square feet including 98,294 square feet of basement
Foundation:	Reinforced concrete
Walls:	Protected metal
Roof:	Protected metal - monitor
Frame:	Protected metal
Floors:	Reinforced concrete
Heating:	None
Lighting:	Mercury vapor, sodium vapor and incandescent
Plumbing:	None
Sprinklers:	None
Craneway:	Overhead
Passageways:	Two above grade and two in basement to Building 13

COST APPROACH (Continued)

Reproduction Cost - Building 12

Excavation and Foundation	$ 97,775
Exterior Walls	133,308
Roof Structure	331,753
Roof Cover	182,661
Frame	503,019
Floor Structure	476,897
Electrical and Lighting	55,283
Basement	979,850
Total Reproduction Cost New	$2,760,546

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 13

Type:	One story and basement industrial building
Use:	Aluminum reduction
Built:	1965
Area:	199,378 square feet including 98,294 square feet of basement
Foundation:	Reinforced concrete
Walls:	Protected metal
Roof:	Protected metal - monitor
Frame:	Protected metal
Floors:	Reinforced concrete
Heating:	None
Lighting:	Mercury vapor, sodium vapor and incandescent
Plumbing:	None
Sprinklers:	None
Craneway:	Overhead
Passageways:	Two above grade and two in basement to Building 14

COST APPROACH (Continued)

Reproduction Cost - Building 13

Excavation and Foundation	$ 97,775
Exterior Walls	195,216
Roof Structure	331,753
Roof Cover	182,661
Frame	503,019
Floor Structure	476,897
Electrical and Lighting	55,283
Basement	979,850
Total Reproduction Cost New	$2,822,449

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 14

Type:	One story and basement industrial building
Use:	Aluminum reduction
Built:	1967
Area:	199,378 square feet including 98,294 square feet of basement
Foundation:	Reinforced concrete
Walls:	Protected metal
Roof:	Protected metal - monitor
Frame:	Protected metal
Floors:	Reinforced concrete
Heating:	None
Lighting:	Mercury vapor, sodium vapor and incandescent
Plumbing:	None
Sprinklers:	None
Craneway:	Overhead
Passageways:	Two above grade and one in basement to Building 15

COST APPROACH (Continued)

Reproduction Cost - Building 14

Excavation and Foundation	$ 97,775
Exterior Walls	195,216
Roof Structure	331,753
Roof Cover	182,661
Frame	503,019
Floor Structure	476,897
Electrical and Lighting	55,283
Basement	979,850
Total Reproduction Cost New	$2,822,449

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 15

Type:	One story and basement industrial building
Use:	Aluminum reduction
Built:	1967
Area:	199,378 square feet including 98,294 square feet of basement
Foundation:	Reinforced concrete
Walls:	Protected metal
Roof:	Protected metal - monitor
Frame:	Protected metal
Floors:	Reinforced concrete
Heating:	None
Lighting:	Mercury vapor, sodium vapor and incandescent
Plumbing:	None
Sprinklers:	None
Craneway:	Overhead
Passageways:	Two above grade and 2 in basement to Building 16

COST APPROACH (Continued)

Reproduction Cost - Building 15

Excavation and Foundation	$ 97,775
Exterior Walls	195,216
Roof Structure	331,753
Roof Cover	182,661
Frame	503,019
Floor Structure	476,897
Electrical and Lighting	55,283
Basement	979,850
Total Reproduction Cost New	$2,822,449

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 16

Type:	One story and basement industrial building
Use:	Aluminum reduction
Built:	1967
Area:	199,378 square feet including 98,294 square feet of basement
Foundation:	Reinforced concrete
Walls:	Protected metal
Roof:	Protected metal - monitor
Frame:	Protected metal
Floors:	Reinforced concrete
Heating:	None
Lighting:	Mercury vapor, sodium vapor and incandescent
Plumbing:	None
Sprinklers:	None
Craneway:	Overhead
Passageways:	Two above grade and two in basement to Building 17

COST APPROACH (Continued)

Reproduction Cost - Building 16

Excavation and Foundation	$ 97,775
Exterior Walls	195,216
Roof Structure	331,753
Roof Cover	182,661
Frame	503,019
Floor Structure	476,897
Electrical and Lighting	55,283
Basement	979,850
Total Reproduction Cost New	$2,822,449

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 17

Type:	One story and basement industrial building
Use:	Aluminum reduction
Built:	1967
Area:	188,268 square feet including 94,134 square feet of basement
Foundation:	Reinforced concrete
Walls:	Protected metal
Roof:	Protected metal - monitor
Frame:	Protected metal
Floors:	Reinforced concrete
Heating:	None
Lighting:	Mercury vapor, sodium vapor and incandescent
Plumbing:	None
Sprinklers:	None
Craneway:	Overhead

COST APPROACH (Continued)

Reproduction Cost - Building 17

Excavation and Foundation	$ 92,854
Exterior Walls	185,707
Roof Structure	319,830
Roof Cover	172,811
Frame	482,324
Floor Structure	456,531
Electrical and Lighting	52,875
Basement	941,434
Total Reproduction Cost New	$2,704,367

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 18

Type:	High one-story industrial building with appendages
Use:	Crane bay, crane repair, pot rebuild, storage and shop offices
Built:	1954, 1965 and 1967
Area:	130,200 square feet
Foundation:	Reinforced concrete
Walls:	Corrugated metal, some section protected metal
Roof:	Built up composition on metal deck
Frame:	Steel
Floors:	Concrete
Heating:	Space heaters in some sections
Lighting:	Mercury vapor, sodium vapor, fluorescent and incandescent
Plumbing:	Minimal
Sprinklers:	None
Partitions:	Brick, block and corrugated metal
Craneway:	Overhead with 3 50-ton and 2 15-ton cranes

COST APPROACH (Continued)

Reproduction Cost - Building 18

Excavation and Foundation	$ 132,547
Exterior Walls	154,976
Roof Structure	480,660
Roof Cover	147,192
Frame	441,767
Floor Structure	235,051
Floor Covering	935
Ceiling	5,097
Interior Components	655
Heating, Ventilation and Air Conditioning	1,496
Electrical and Lighting	83,669
Plumbing	3,729
Elevators	75,208
Total Reproduction Cost New	$1,762,982

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 19

Type:	One story structure around silos and one story structure on top of silos
Use:	Silo shed, briquet silo plant and head house
Built:	1954
Area:	38,800 square feet
Foundation:	Concrete and column footings
Walls:	Corrugated metal
Roof:	Corrugated metal
Frame:	Steel
Floors:	Concrete and steel
Heating:	None
Lighting:	Incandescent
Plumbing:	None
Sprinklers:	None

COST APPROACH (Continued)

Reproduction Cost - Building 19

Excavation and Foundation	$ 25,881
Exterior Walls	17,369
Roof Structure	82,137
Roof Cover	17,332
Frame	92,272
Floor Structure	61,560
Electrical and Lighting	21,868
Total Reproduction Cost New	$318,419

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 20

Type:	One story multi-sectioned industrial structure ranging in height from 12 to 24 feet.
Use:	Garage, electric shop, field offices, lunchroom and crane shed
Built:	1954
Area:	30,192 square feet
Foundation:	Concrete
Walls:	Corrugated metal, concrete block and industrial projected steel sash
Roof:	Corrugated metal on steel trusses
Frame:	Steel
Floors:	Concrete
Heating:	Gas fired space heaters
Lighting:	Mercury vapor, fluorescent in office
Plumbing:	Minimal
Sprinklers:	In garage section
Partitions:	Mezzanine and office areas

COST APPROACH (Continued)

Reproduction Cost - Building 20

Excavation and Foundation	$ 19,401
Exterior Walls	48,724
Roof Structure	30,539
Roof Cover	36,288
Frame	62,875
Floor Structure	39,012
Floor Covering	1,495
Ceiling	2,380
Interior Components	28,096
Heating, Ventilation and Air Conditioning	11,497
Electrical and Lighting	27,306
Plumbing	6,467
Sprinklers	14,000
Total Reproduction Cost New	$328,080

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 21

Type:	One story structure on grade and one story structure on top of silos
Use:	Silo building and silo head house
Built:	1967
Area:	13,560 square feet
Foundation:	Reinforced concrete and column footings
Walls:	Concrete and corrugated metal
Roof:	Corrugated metal
Frame:	Steel
Floors:	Concrete and steel plate
Lighting:	Incandescent
Sprinklers:	None

COST APPROACH (Continued)

Reproduction Cost - Building 21

Excavation and Foundation	$ 5,912
Exterior Walls	35,361
Roof Structure	17,677
Roof Cover	15,475
Frame	26,507
Floor Structure	22,519
Electrical and Lighting	6,282
Total Reproduction Cost New	$129,733

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 22

Type:	One story industrial
Use:	Stud repair shop
Built:	1954
Area:	6,624 square feet
Foundation:	Concrete
Walls:	Corrugated metal
Roof:	Built up composition on steel deck on steel trusses
Frame:	Steel
Floors:	Concrete
Heating:	Gas fired space heaters
Lighting:	Minimal
Plumbing	Minimal
Sprinklers:	None

COST APPROACH (Continued)

Reproduction Cost - Building 22

Excavation and Foundation	$ 4,114
Exterior Walls	9,141
Roof Structure	20,110
Roof Cover	3,656
Frame	13,102
Floor Structure	7,922
Interior Components	838
Heating, Ventilation and Air Conditioning	2,514
Electrical and Lighting	3,123
Plumbing	1,066
Total Reproduction Cost New	$65,586

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 23

Type:	One-story attached industrial structure
Use:	Ajax Building
Built:	1970
Area:	4,000 square feet
Foundation:	Concrete
Walls:	Single wall is corrugated metal
Roof:	Corrugated metal
Frame:	Steel
Floors:	Concrete
Heating:	None
Lighting:	Incandescent
Plumbing:	None
Sprinklers:	None

COST APPROACH (Continued)

Reproduction Cost - Building 23

Excavation and Foundation	$ 2,614
Exterior Walls	1,113
Roof Structure	7,647
Roof Cover	4,888
Frame	8,325
Floor Structure	4,985
Electrical and Lighting	1,984
Total Reproduction Cost New	$31,554

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 24

Type:	One-story attached industrial structure
Use:	Dross cooling
Built:	1970
Area:	5,000 square feet
Foundation:	Concrete
Walls:	Corrugated metal
Roof:	Corrugated metal
Frame:	Steel
Floors:	Concrete
Heating:	None
Lighting:	Incandescent
Plumbing:	None
Sprinklers:	None

COST APPROACH (Continued)

Reproduction Cost - Building 24

Excavation and Foundation	$ 3,438
Exterior Walls	1,286
Roof Structure	9,813
Roof Cover	6,313
Frame	10,750
Floor Structure	6,438
Interior Components	688
Electrical and Lighting	2,563
Total Reproduction Cost New	$41,289

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 25

Type:	One-story, freestanding industrial
Use:	Crusher operations and storage
Built:	1954
Area:	4,000 square feet
Foundation:	Concrete
Walls:	Corrugated metal
Roof:	Corrugated metal
Frame:	Steel
Floors:	Concrete
Heating:	Unit heaters
Lighting:	Incandescent
Plumbing:	None
Sprinklers:	None

COST APPROACH (Continued)

Reproduction Cost - Building 25

Excavation and Foundation	$ 2,596
Exterior Walls	5,711
Roof Structure	7,269
Roof Cover	4,767
Frame	8,071
Floor Structure	4,862
Interior Components	566
Heating, Ventilation and Air Conditioning	1,369
Electrical and Lighting	1,935
Total Reproduction Cost New	$37,146

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 26

Type:	Long, narrow one-story structure
Use:	Haulage shed
Built:	1967
Area:	3,960 square feet
Foundation:	Concrete
Walls:	Corrugated aluminum on steel
Roof:	Protected metal on steel trusses
Frame:	Steel
Floors:	Concrete
Heating:	None
Lighting:	Incandescent
Plumbing:	None
Sprinklers:	None

COST APPROACH (Continued)

Reproduction Cost - Building 26

Excavation and Foundation	$ 2,549
Exterior Walls	2,973
Roof Structure	6,989
Roof Cover	5,802
Frame	8,000
Floor Structure	4,659
Electrical and Lighting	1,802
Total Reproduction Cost New	$32,774

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 27

Type:	Two-story industrial
Use:	Rectifier building
Built:	1954
Area:	39,440 square feet
Foundation:	Concrete
Walls:	Reinforced concrete
Roof:	Built up composition on steel deck on steel girder
Frame:	Steel
Floors:	Concrete
Heating:	Unit space heaters
Lighting:	Fluorescent and incandescent
Plumbing:	Standard
Sprinklers:	None
Partitions:	Control Room
Miscellaneous:	2-ton craneway on second floor

COST APPROACH (Continued)

Reproduction Cost - Building 27

Excavation and Foundation	$ 24,697
Exterior Walls	128,267
Roof Structure	70,706
Roof Cover	9,560
Frame	89,229
Floor Structure	84,449
Floor Covering	9,441
Ceiling	2,948
Interior Components	9,162
Heating, Ventilation and Air Conditioning	13,544
Electrical and Lighting	39,038
Plumbing	6,374
Total Reproduction Cost	$487,415

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 28

Type:	High one-story concrete block structure with mezzanine
Use:	House rectifier equipment
Built:	1967
Area:	31,782 square feet
Foundation:	Concrete
Walls:	Reinforced concrete and concrete block
Roof:	Built-up composition on steel deck
Frame:	Steel
Floors:	Concrete
Heating:	Electric
Lighting:	Incandescent and fluorescent
Plumbing:	Minimal
Sprinklers:	None
Partitions:	Concrete block

COST APPROACH (Continued)

Reproduction Cost - Building 28

Excavation and Foundation	$ 24,500
Exterior Walls	110,437
Roof Structure	101,098
Roof Cover	18,080
Frame	64,220
Floor Structure	40,834
Floor Covering	4,547
Interior Components	33,781
Heating, Ventilation and Air Conditioning	30,811
Electrical and Lighting	20,417
Plumbing	6,682
Total Reproduction Cost New	$ 455,407

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 29

Type:	High one story industrial building
Use:	Crylolite plant
Built:	1954
Area:	399 square feet
Foundation:	Concrete
Walls:	Corrugated metal
Roof:	Corrugated metal on open steel
Frame:	Steel
Floors:	Concrete
Heating:	None
Lighting:	Incandescent
Plumbing:	None
Sprinklers:	None

COST APPROACH (Continued)

Reproduction Cost - Building 29

Excavation and Foundation	$ 718
Exterior Walls	1,368
Roof Structure	1,850
Roof Cover	1,132
Frame	2,523
Floor Structure	1,222
Interior Components	1,525
Electrical and Lighting	774
Total Reproduction Cost New	$11,112

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 30

Type:	Multi sectioned industrial structure with heights ranging from 12 to 128 feet
Use:	Paste plant, pole storage and coke plant
Built:	1954 with additions
Area:	20,895 square feet
Foundation:	Concrete
Walls:	Corrugated iron, some concrete block
Roof:	Built-up composition on steel deck on steel trusses
Frame:	Steel
Floors:	Concrete on ground, partial floors of steel grating
Heating:	Unit space heaters
Lighting:	Incandescent
Plumbing:	Minimal
Sprinklers:	Partial

COST APPROACH (Continued)

Reproduction Cost - Building 30

Excavation and Foundation	$ 24,207
Exterior Walls	45,470
Roof Structure	123,015
Roof Cover	21,714
Frame	76,573
Floor Structure	169,461
Interior Components	7,799
Heating, Ventilation and Air Conditioning	12,455
Electrical and Lighting	15,140
Plumbing	907
Sprinklers	18,581
Total Reproduction Cost New	$515,322

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 32

Type:	One story with tank pit
Use:	Treatment plant
Built:	1954 and 1964
Area:	1,188 square feet
Foundation:	Concrete
Walls:	Corrugated metal
Roof:	Corrugated metal on steel trusses
Frame:	Steel
Floors:	Concrete
Heating:	Space heaters
Lighting:	Incandescent
Plumbing:	Standard
Sprinklers:	None

COST APPROACH (Continued)

Reproduction Cost - Building 32

Excavation and Foundation	$ 988
Exterior Walls	1,853
Roof Structure	1,282
Roof Cover	1,606
Frame	2,965
Floor Structure	1,637
Interior Components	278
Heating, Ventilation and Air Conditioning	510
Electrical and Lighting	633
Plumbing	216
Total Reproduction Cost New	$11,968

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 33

Type:	One-story unloading shed
Use:	Coke unloading
Built:	1954
Area:	7,888 square feet
Foundation:	Concrete
Walls:	Corrugated metal
Roof:	Composition built-up on steel deck
Frame:	Steel
Floors:	Partial concrete and steel grating
Heating:	Space heaters
Lighting:	Incandescent
Plumbing:	Standard
Sprinklers:	None
Miscellaneous:	Two corrugated fan room lean-tos

COST APPROACH (Continued)

Reproduction Cost - Building 33

Excavation and Foundation	$ 5,820
Exterior Walls	12,894
Roof Structure	28,200
Roof Cover	5,405
Frame	18,915
Floor Structure	23,201
Interior Components	1,163
Heating, Ventilation and Air Conditioning	3,383
Electrical and Lighting	4,432
Plumbing	1,480
Total Reproduction Cost New	$104,893

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 34

Type:	Sectioned one story and mezzanine unloading and storage
Use:	Pitch unloading and carbon block storage
Built:	1954
Area:	15,664 square feet
Foundation:	Concrete
Walls:	Cement block and corrugated iron
Roof:	Corrugated metal on steel trusses
Frame:	Steel
Floors:	Partial Concrete
Heating:	None
Lighting:	Incandescent
Plumbing:	Standard
Sprinklers:	Partial

COST APPROACH (Continued)

Reproduction Cost - Building 34

Excavation and Foundation	$ 10,816
Exterior Walls	39,476
Roof Structure	16,383
Roof Cover	20,324
Frame	35,190
Floor Structure	20,074
Interior Components	1,108
Electrical and Lighting	4,162
Plumbing	1,410
Sprinklers	8,662
Total Reproduction Cost	$157,605

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 35

Type:	High one-story tower and shed
Use:	Alumina unloading station
Built:	1954
Area:	11,412 square feet
Foundation:	Concrete
Walls:	Corrugated metal
Roof:	Built-up composition on steel deck
Frame:	Steel
Floors:	Concrete ramp, railroad siding; steel grading over dump pit
Heating:	Space heaters
Lighting:	Incandescent
Plumbing:	Minimal
Sprinklers:	None

COST APPROACH (Continued)

Reproduction Cost - Building 35

Excavation and Foundation	$ 9,689
Exterior Walls	10,545
Roof Structure	44,102
Roof Cover	8,186
Frame	28,900
Floor Structure	23,625
Heating, Ventilation and Air Conditioning	4,564
Electrical and Lighting	5,848
Total Reproduction Cost New	$144,459

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 36

Type:	High one-story
Use:	Alumina unloading and storage
Built:	1967
Area:	5,408 square feet
Foundation:	Concrete
Walls:	Corrugated aluminum
Roof:	Corrugated protected metal and corrugated translucent panel
Frame:	Steel
Floors:	Concrete, steel plate, and macadam
Heating:	Space heaters
Lighting:	Incandescent
Plumbing:	None
Sprinklers:	None
Elevators:	Steel cab., 2,500 lb. cap. passenger

COST APPROACH (Continued)

Reproduction Cost - Building 36

Excavation and Foundation	$ 4,819
Exterior Walls	8,055
Roof Structure	21,852
Roof Cover	3,988
Frame	14,290
Floor Structure	12,795
Heating, Ventilation and Air Conditioning	554
Electrical and Lighting	3,472
Elevators	71,100
Total Reproduction Cost New	$140,925

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 37

Type:	High one-story industrial
Use:	Burnt lime storage
Built:	1954
Area:	5,208 square feet
Foundation:	Concrete
Walls:	Corrugated metal
Roof:	Corrugated metal on steel trusses
Frame:	Steel
Floors:	Concrete
Heating:	Unit space heaters
Lighting:	Incandescent
Plumbing:	Standard
Sprinklers:	None

COST APPROACH (Continued)

Reproduction Cost - Building 37

Excavation and Foundation	$ 4,479
Exterior Walls	8,836
Roof Structure	6,776
Roof Cover	8,320
Frame	14,304
Floor Structure	13,823
Interior Components	573
Heating, Ventilation and Air Conditioning	2,637
Electrical and Lighting	2,458
Plumbing	638
Total Reproduction Cost New	$62,844

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 38

Type:	One story
Use:	Boiler house
Built:	1954
Area:	4,680 square feet
Foundation:	Concrete
Walls:	Corrugated metal
Roof:	Corrugated metal
Frame:	Steel
Floors:	Concrete slab
Lighting:	Incandescent and mercury vapor
Plumbing:	Minimal
Sprinklers:	Area near boiler - Yes

COST APPROACH (Continued)

Reproduction Cost - Building 38

Excavation and Foundation	$ 2,986
Exterior Walls	7,275
Roof Structure	6,949
Roof Cover	5,483
Frame	9,555
Floor Structure	5,755
Interior Components	597
Electrical and Lighting	2,280
Power Wiring	814
Total Reproduction Cost New	$41,694

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 39

Type:	One story garage structure
Use:	Garage and storage
Area:	4,500 square feet
Foundation:	Concrete
Walls:	Corrugated metal
Roof:	Corrugated metal
Frame:	Light-weight steel and wood
Floors:	Concrete slab
Heating:	Gas fired space heaters
Lighting:	Incandescent
Plumbing:	None
Sprinklers:	None

COST APPROACH (Continued)

Reproduction Cost - Building 39

Excavation and Foundation	$ 1,798
Exterior Walls	5,794
Roof Structure	7,742
Roof Cover	4,945
Frame	8,541
Floor Structure	5,145
Heating, Ventilation and Air Conditioning	1,449
Power Wiring	1,948
Total Reproduction Cost New	$37,362

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 40

Type:	One story Quonset building
Use:	Warehouse
Built:	1954
Area:	5,200 square feet
Foundation:	Concrete
Walls:	Corrugated metal
Roof:	Corrugated metal
Frame:	Steel
Floors:	Concrete
Heating:	Space heating
Lighting:	Incandescent
Plumbing:	Minimal
Sprinklers:	None

COST APPROACH (Continued)

Reproduction Cost - Building 40

Excavation and Foundation	$ 804
Exterior Walls	6,460
Frame and Roof Structure	11,103
Floor Structure	7,798
Heating, Ventilation and Air Conditioning	1,794
Electrical and Lighting	2,537
Plumbing	990
Total Reproduction Cost New	$31,486

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 41

Type:	One story
Use:	Pump house
Built:	1954
Area:	1,920 square feet
Foundation:	Concrete
Walls:	Corrugated metal
Roof:	Flat - asbestos protected metal deck
Frame:	Steel
Floors:	Concrete slab
Heating:	Unit heat
Lighting:	Incandescent
Plumbing:	Minimal
Sprinklers:	None

COST APPROACH (Continued)

Reproduction Cost - Building 41

Excavation and Foundation	$ 1,231
Exterior Walls	2,834
Roof Structure	7,318
Roof Cover	1,138
Frame	4,019
Floor Structure	2,416
Interior Components	255
Heating, Ventilation and Air Conditioning	743
Electrical and Lighting	953
Plumbing	325
Total Reproduction Cost New	$21,232

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 42

Type:	One story warehouse
Use:	Utility building
Built:	1965
Area:	4,920 square feet
Foundation:	Concrete
Walls:	Corrugated metal
Roof:	Insulated steel
Frame:	Light-weight steel
Floors:	Concrete slab
Heating:	Electric baseboard
Lighting:	Fluorescent
Plumbing:	Standard
Sprinklers:	None

COST APPROACH (Continued)

Reproduction Cost - Building 42

Excavation and Foundation	$ 1,705
Exterior Walls	5,357
Roof Structure	7,549
Roof Cover	6,040
Frame	8,329
Floor Structure	4,968
Ceiling	5,556
Interior Components	731
Heating, Ventilation and Air Conditioning	3,945
Electrical and Lighting	2,630
Plumbing	779
Total Reproduction Cost New	$45,589

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 43

Type:	One story
Use:	Sewage treatment
Built:	1954
Area:	2,320 square feet
Foundation:	Concrete
Walls:	Concrete to grade, brick above
Roof:	Corrugated metal on insulated steel deck on steel trusses
Frame:	Steel
Floors:	Concrete
Heating:	Space heating
Lighting:	Incandescent
Plumbing:	None
Sprinklers:	None

COST APPROACH (Continued)

Reproduction Cost - Building 43

Excavation and Foundation	$ 1,725
Exterior Walls	9,413
Roof Structure	7,980
Roof Cover	2,251
Frame	5,613
Floor Structure	3,508
Interior Components	322
Heating, Ventilation and Air Conditioning	994
Electrical and Lighting	1,228
Total Reproduction Cost New	$33,034

COST APPROACH (Continued)

Description of Improvements (Continued)

Building No. 44

Type:	One story prefabricated metal structure
Use:	Process control computer building
Built:	1977
Area:	1,350 square feet
Foundation:	Concrete
Walls:	Corrugated metal
Roof:	Insulated corrugated metal
Frame:	Steel arches
Floors:	Concrete with vinyl asbestos covering
Heating:	Hot water electric baseboard with ceiling air conditioning ducts
Lighting:	Hung fluorescent
Plumbing:	Minimal
Sprinklers:	None
Partitions:	Minimal

COST APPROACH (Continued)

Reproduction Cost - Building 44

Excavation and Foundation	$ 767
Exterior Walls	3,978
Roof Structure	1,394
Roof Cover	2,145
Frame	3,007
Floor Structure	1,613
Floor Covering	908
Ceiling	1,049
Interior Components	235
Heating, Ventilation and Air Conditioning	3,868
Electrical and Lighting	1,002
Plumbing	282
Total Reproduction Cost New	$20,248

COST APPROACH (Continued)

Description of Improvements (Continued)

Yard Buildings

No.	Use	Area Sq. Ft.	Repro Cost-New
Y-1	Gate House	196	$ 2,687
Y-3	Lab Storage	448	1,967
Y-4	Hose House	450	3,660
Y-5	Pumping Station	440	3,757
Y-6	Switch Room	360	3,069
Y-7	Scrubber Fan House	242	3,364
Y-8	Scrubber Fan House	242	3,364
Y-9	Scrubber Fan House	242	3,364
Y-10	Scrubber Fan House	242	3,364
Y-11	Scrubber Fan House	242	3,364
Y-12	Scrubber Fan House	242	3,364
Y-13	Scrubber Fan House	242	3,364
Y-14	Scrubber Fan House	242	3,364
Y-15	Scrubber Fan House	242	3,364
Y-16	Scrubber Fan House	242	3,364
Y-17	Scrubber Fan House	242	3,364
Y-18	Scrubber Fan House	242	3,364
Y-19	Scrubber Fan House	242	3,364
Y-20	Scrubber Fan House	242	3,364
Y-21	Scrubber Fan House	242	3,364
Y-22	Scrubber Fan House	242	3,364
Y-23	Scrubber Fan House	242	3,364
Y-24	Scrubber Fan House	242	3,364

COST APPROACH (Continued)

Description of Improvements (Continued)

Yard Buildings (Continued)

No.	Use	Area Sq. Ft.	Repro. Cost-New
Y-25	Scrubber Fan House	242	$ 3,364
Y-26	Scrubber Fan House	242	3,364
Y-27	Scrubber Fan House	242	3,364
Y-28	Scrubber Fan House	242	3,364
Y-29	Scrubber Fan House	242	3,364
Y-30	Scrubber Fan House	242	3,364
Y-31	Scrubber Fan House	242	3,364
Y-32	Scrubber Fan House	242	3,364
Y-33	Scrubber Fan House	242	3,364
Y-34	Scrubber Fan House	242	3,364
Y-35	Scrubber Fan House	242	3,364
Y-36	Scrubber Fan House	242	3,364
Y-37	Office and Lav. Lean-To Lunch and Elec. Room	560	6,002
Y-38	Lean-To	750	8,248
Y-39	Switch Room	336	3,180
Y-40	Office Lean-To	2800	32,720
Y-42	Office & Lav. Lean-To Lunch Room and Maint.	560	6,002
Y-43	Lean-To	900	9,354
Y-44	Switch Room	336	3,901
Y-45	Casting Office	600	6,034
Y-46	Switch House	480	4,543
Y-47	Office & Lav. Lean-To Lunch and Stor. Room	520	5,574
Y-48	Lean-To	624	5,827

COST APPROACH (Continued)

Description of Improvements (Continued)

Yard Buildings (Continued)

No.	Use	Area Sq. Ft.	Repro. Cost-New
Y-49	Switch Room	480	$ 4,543
Y-51	Office & Lav. Lean-To Lunch Room and Stor.	440	4,716
Y-52	Lean-To	484	4,520
Y-53	Switch Room	480	4,543
Y-54	Office & Lav. Lean-To Lunch Room and Stor.	440	4,716
Y-55	Lean-To	484	4,520
Y-56	Switch Room	480	4,543
Y-57	Scale House	540	4,823
Y-58	Grease & Oil Building	800	5,853
Y-60	Butler Building	1000	7,502
Y-61	Sand Blast Room	360	3,633
Y-62	Valve and Meter House	80	528
Y-63	Emer. Propane Stor. Lean-To	840	5,106
Y-64	Motor Room	60	425

COST APPROACH (Continued)

Description of Improvements (Continued)

Yard Buildings (Continued)

No.	Use	Area SF	Repro. Cost-New
Y-65	Transformer Oil Pump House	1,152	$ 8,644
Y-66	Fan House	1,020	10,617
Y-67	Fire Pump House	696	7,479
Y-68	Oil Pump House	400	3,369
Y-69	Scale House	440	4,497
Y-70	Fire Pump House	336	4,837
Y-71	Pump House	600	11,401
Y-72	Switch House	400	3,262
Y-73	Switch House	1,024	8,498
Y-74	Pump House	80	583
Total Yard Buildings		30,736	$330,603

COST APPROACH (Continued)

Yard Improvements

Fencing:	14,900 Linear Feet	$ 86,539
Paving:	900,000 Square Feet	388,800
Yard Lights:	48 Poles	48,768
Underground Piping:	45,000 Linear Feet	302,400
Retaining Walls:	4,500 Linear Feet	28,350
Railroad Spurs:	21,500 Linear Feet	619,200
Total Yard Improvements:		$1,474,057

COST APPROACH (Continued)

Building No.	Area SF	Price per SF*	Reproduction Cost-New	Physical Deterioration %	Physical Deterioration Amount	Depreciated Cost Before Obsolescence	Functional Obsolescence Excluding Basement Space	Functional Obsolescence Basement Space	Depreciated Cost Before Economic Obsolescence
1	13,381	$18.26	$ 244,364	58	$ 141,731	$ 102,633	$ 15,395	- 0 -	$ 87,238
2	14,780	17.09	252,528	58	146,466	106,062	15,909	- 0 -	90,153
3	6,880	29.08	200,064	55	110,035	90,029	13,504	- 0 -	76,525
4	3,186	15.12	48,182	28	13,491	34,691	5,204	- 0 -	29,487
5	33,488	13.53	453,132	57	258,285	194,847	29,227	- 0 -	165,620
6	58,648	14.59	855,593	58	496,244	359,349	53,902	- 0 -	305,447
7	204,360	14.21	2,903,437	58	1,683,993	1,219,444	100,725	547,943	570,776
8	204,520	14.20	2,904,937	58	1,684,863	1,220,074	100,820	547,943	571,311
9	204,520	14.20	2,904,937	58	1,684,863	1,220,074	100,820	547,943	571,311
10	196,632	14.32	2,815,723	58	1,633,119	1,182,604	95,023	549,118	538,463
11	96,450	18.68	1,802,030	58	1,045,177	756,853	113,528	- 0 -	643,325
12	199,378	13.85	2,760,546	33	910,980	1,849,566	147,612	865,485	836,469
13	199,378	14.16	2,822,449	33	931,408	1,891,041	149,057	897,329	844,655
14	199,378	14.16	2,822,449	28	790,286	2,032,163	160,180	964,294	907,689
15	199,378	14.16	2,822,449	28	790,286	2,032,163	160,180	964,294	907,689
16	199,378	14.16	2,822,449	28	790,286	2,032,163	160,180	964,294	907,689
17	188,268	14.36	2,704,367	28	757,223	1,947,144	155,577	909,967	881,600
18	130,200	13.54	1,762,982	28	493,635	1,269,347	190,402	- 0 -	1,078,945
19	38,800	8.21	318,419	60	191,051	127,368	19,105	- 0 -	108,263
20	30,192	10.87	328,080	60	196,848	131,232	19,685	- 0 -	111,547
21	13,560	9.57	129,733	30	38,920	90,813	13,622	- 0 -	77,191
22	6,624	9.90	65,586	60	39,352	26,234	3,935	- 0 -	22,299
23	4,000	7.89	31,554	18	5,680	25,874	3,881	- 0 -	21,993
24	5,000	8.26	41,289	18	7,432	33,857	5,079	- 0 -	28,778
25	4,000	9.29	37,146	60	22,288	14,858	2,229	- 0 -	12,629
26	3,960	8.28	32,774	25	8,194	24,580	3,687	- 0 -	20,893
27	39,440	12.36	487,415	58	282,701	204,714	30,707	- 0 -	174,007
28	31,782	14.33	455,407	25	113,852	341,555	51,233	- 0 -	290,322
29	399	27.85	11,112	62	6,889	4,223	633	- 0 -	3,590
30	20,895	24.66	515,322	54	278,274	237,048	35,557	- 0 -	201,491
32	1,188	10.07	11,968	45	5,386	6,582	987	- 0 -	5,595

COST APPROACH (Continued)

Building No.	Area SF	Price per SF*	Reproduction Cost-New	Physical Deterioration %	Physical Deterioration Amount	Depreciated Cost Before Obsolescence	Functional Obsolescence Excluding Basement Space	Functional Obsolescence Basement Space	Depreciated Cost Before Economic Obsolescence
33	7,888	$13.30	$ 104,893	60	$ 62,936	$ 41,957	$ 6,294	$ - 0 -	$ 35,663
34	15,664	10.06	157,605	62	97,715	59,890	8,984	- 0 -	50,906
35	11,412	12.66	144,459	58	83,786	60,673	9,101	- 0 -	51,572
36	5,408	26.06	140,925	25	35,231	105,694	15,854	- 0 -	89,840
37	5,208	12.07	62,844	62	38,963	23,881	3,582	- 0 -	20,299
38	4,680	8.91	41,694	52	21,681	20,013	3,002	- 0 -	17,011
39	4,500	8.30	37,362	64	23,912	13,450	2,018	- 0 -	11,432
40	5,200	6.06	31,486	62	19,521	11,965	1,795	- 0 -	10,170
41	1,920	11.06	21,232	60	12,739	8,493	1,274	- 0 -	7,219
42	4,920	9.27	45,589	60	27,353	18,236	2,735	- 0 -	15,501
43	2,320	14.24	33,034	48	15,856	17,178	2,577	- 0 -	14,601
44	1,350	15.00	20,248	--	- 0 -	20,248	3,037	- 0 -	17,211
	2,622,513	$14.18 (Avg.)	$37,209,794	43 (Avg.)	$15,998,931	$21,210,863	$2,017,838	$7,758,610	$11,434,415
Yard Buildings	30,736	$10.76 (Avg.)	330,603	43 (Avg.)	142,159	188,444	28,267	- 0 -	160,177
Total All Buildings	2,653,249	$14.15 (Avg.)	$37,540,397	43 (Avg.)	$16,141,090	$21,399,307	$2,046,105	$7,758,610	$11,594,592
Site Improvements									
Fencing	14,900 LF	$ 5.81 LF	$ 86,539	50	$ 43,270	$ 43,269	$ - 0 -	$ - 0 -	$ 43,269
Paving	900,000	$ .43	388,800	60	233,280	155,520	- 0 -	- 0 -	155,520
Yard Lights	48 Poles	$1,016 Pole	48,768	40	19,508	29,260	- 0 -	- 0 -	29,260
Underground Piping	45,000 LF	$ 6.72 LF	302,400	30	90,720	211,680	- 0 -	- 0 -	211,680
Retaining Walls	4,500 LF	$ 6.30 LF	28,350	50	14,175	14,175	- 0 -	- 0 -	14,175
Railroad Spurs	21,500 LF	$28.80 LF	619,200	50	309,600	309,600	- 0 -	- 0 -	309,600
Total Site Improvements			$ 1,474,057	48.2 (Avg.)	$ 710,553	$ 763,504	$ - 0 -	$ - 0 -	$ 763,504
Total All Improvements			$39,014,454	43.2 (Avg.)	$16,851,643	$22,162,811	$2,046,105	$7,758,610	$12,358,096

*Unit costs are listed for convenience only and may not compute exactly due to rounding.

COST APPROACH (Continued)

Depreciation

Reproduction cost is the estimated cost of reproducing a property new using the same or closely similar materials at current prices. Subtracted from this cost estimate is an item known as depreciation, and to the remainder is added the value of the land in order to arrive at a final estimate of value.

Depreciation or accrued depreciation as used in the appraisal of real estate is a reduction from reproduction cost. It is the difference between reproduction cost from the date of appraisal and the value from the date of appraisal.

Depreciation falls into three major categories: physical deterioration, functional obsolescence, and economic obsolescence. Both physical deterioration and functional obsolescence are due to internal causes within the property itself. Each of these categories may be further divided into classifications of curable and incurable items. Economic obsolescence is based upon external factors.

The loss in value from each of the forms of depreciation are as follows:

1. Physical Deterioration -- Loss of value resulting from wear, tear, disintegration, use in service, and action of the elements.
2. Functional Obsolescence -- Loss in value caused by factors inherent in the property itself such as overcapacity, inadequacy, technological changes, etc.
3. Economic Obsolescence -- Loss in value caused by factors external to the property itself, those over which the property has no direct influence.

COST APPROACH (Continued)

Physical Deterioration is most often a matter of observation by the appraisers. Many factors are observed, weighed, and considered to arrive at a final judgment of the percentage of depreciation from new conditions: physical condition of floors, walls, ceilings, roofs, operating equipment, settlement rate, action of the elements on the structure, and numerous others. In the present instance, subject property shows the effects of long exposure to the very heavy wear and tear suffered from use in a heavy industry subject to extreme cold, extreme heat, rough handling of heavy weight, continued vibration from equipment, among other things.

We have computed physical deterioration for the various building components of each section of the subject utilizing the age life method, the straight line method, observations made during inspection and a combination of each.

Functional Obsolescence

Functional obsolescence is both a matter of observation and knowledge of the particular needs of the industry. The subject was initially constructed in 1954 with a major series of additions and expansions made in 1967. Further, minor additions and conversions have been made to date. The subject was initially constructed for the purpose of reducing alumina to aluminum by the use of the Soderberg reduction process. Technological advances in the reduction process itself have occurred in recent years and most of the newer reduction facilities, including the Anaconda, Seebree, Kentucky, plant, have been designed for the newer Prebake system. In addition, a newer system has been designed by Alcoa utilizing a chemical process combining alumina with chlorine and converting the resulting oxide into aluminum chloride. This compound is then electrically treated, separating it into molten aluminum and chlorine. This system is now in the testing stage at an Alcoa facility in Texas, and, if it proves to be successful, it will make both of the existing methods, i.e. Soderberg and Prebake, obsolete. However, both of these newer systems have an advantage over the

COST APPROACH (Continued)

Functional Obsolescence (Continued)

Soderberg process in that they require fifteen to thirty percent less electricity to produce a pound of aluminum.

The newer reduction processes not only require smaller plant areas, but the structures themselves can be more efficiently designed, thus resulting in a savings in maintenance and repairs. Messrs. Robert A. Sneddon, Manager-Reduction Operations, and Ty Wilson of the Anaconda Company accompanied the appraisers on a tour of the plant. In each of the buildings, we discussed the process being conducted, but further discussed each of the structures with respect to their functional utility and inutility. For example, in the rectifier buildings, we commented on the need for a two-story structure and a craneway on the second floor. The building had specifically been constructed for mercuryarc electric operations which are no longer in use. Also discussed, was the necessity of having high roofs in the pot line rooms, which increased maintenance costs. It should be noted that the Reynolds Reduction plant in Gregory, Texas, which was constructed two years prior to the Anaconda plant in Columbia Falls, has pot line rooms with 28' heights, whereas the Anaconda plant has a total height of 64', thus resulting in an increased height for the Columbia Falls facility of some 36' per building. This plant in Texas also utilizes the Soderberg reduction process.

Further, in the Aluminum Company of America's reduction plant in Alcoa, Tennessee, the pot line buildings which were constructed in 1942 are 30 feet in height while those constructed in 1969 and 1971 are 32 feet in height thus resulting in an excess height for the Columbia Falls plant of 32 to 34 feet.

Mr. Jack Miller of Alumax's engineering department advised that 35 feet from ground to eave is the maximum height that is needed for either the Soderberg or Prebake processes. He further advised that this new plant in South Carolina which will be using the Prebake

COST APPROACH (Continued)

Functional Obsolescence (Continued)

(Peshny) system may be slightly higher depending upon the type of overhead cranes used but in any event ceiling heights will not exceed 40 feet, a savings of 24 feet when compared to the Columbia Falls plant.

In each of the ten pot line buildings, there are basement areas that were initially designed as plenum chambers for the alumina pots, or annodes. These areas serve no function other than to act as depositories for the aluminum in the pots, in the event of an emergency power shortage. These areas are filled with supporting columns for both the annodes and the floor above. In designing the plant, the pots could have been placed on the floor structure, thus, eliminating the need for the basement space altogether. Not only did we discuss the need for basement space with representatives of Anaconda, but we were advised that there are no basement areas in either the Reynolds plant in Gregory, Texas, which uses the Soderberg system, or in the Anaconda, Seebree, plant which uses the Prebake system. Further, the need for basement space was also discussed with representatives of other aluminum companies who advised that none of their pot lines had basement areas. In computing the functional obsolescence for the basement areas, the appraisers have made adjustments for the difference in floor costs as well.

In computing the functional obsolescence for the subject, we have applied a rate of 15 percent, with the exception of the basement areas, which have been computed separately.

COST APPROACH (Continued)

Economic Obsolescence

Economic obsolescence is a loss in value due to adverse influence arising from outside the property. Its adverse influence may affect the land value, the improvement value, or both.

A property will be free of economic obsolescence when:

1. All of the market conditions, especially the forces of supply and demand are in balance.
2. The land and improvements are contributing a proportionate share to property value.
3. There is no degree of market rejection, except for physical deterioration and functional obsolescence previously calculated.

Currently, there is a soft market for all industrial space regardless of size. This is attributed to the recessionary period experienced during the past several years and the fuel crisis which has had its effects on all industry throughout the country.

The appraisers have also considered that, even in a normal market, there is a holding period of one, two, or three years in marketing large industrial facilities. The carrying costs of additional wear and tear, repairs and maintenance expenses, interest, and taxes are easily converted into a value loss.

In the case of the region in which the subject is situated, there has been market rejection for industrial properties. This has been evidenced by both properties older and newer than the subject having condition and building configuration equal to or superior to the subject which have exceeded the calculable limitations employed in estimating physical deterioration and functional obsolescence.

COST APPROACH (Continued)

Economic Obsolescence (Continued)

Also, the lack of nearby sources of raw materials and markets for finished goods in the western sector of Montana adds additional complications in marketing large properties in this state.

The present user of the subject was attracted to the area because of inexpensive electrical power and low railroad rates. The Bonneville Power Authority, which has been the source for primary electricity, essential in the reduction process, in the northwest United States has advised all industrial users that supply contracts will not be renewed. Unless Congressional action is taken, there will be a curtailment of major industrial activities in the region commencing in 1981. It should also be noted that this power is interruptable. When there is a power outage which causes any of the pot lines to be shut down, it takes approximately one year to get them back in working order.

In recent years, the cost of moving materials into and out of the area has increased steadily reaching the point where the advantage of having located in the region is no longer favorable. The major producers of alumina are Jamaica and Australia. The present user imports most of its alumina from Australia, which is transported by waterway to Washington and then by railroad to the subject adding additional freight charges. A better location would be on or near a waterway which would eliminate the additional railroad freight charges. Some examples of this are the Amex plant on Puget Sound, the Reynolds plant in Gregory, Texas, and the new Alumax plant to be built in South Carolina.

The reader's attention is further directed to a study on the United States aluminum industry prepared by our parent company, the Industrial National Bank of Rhode Island. This report appears in the addenda and is to be considered an integral part of this report.

Based upon the foregoing, the appraisers have concluded economic obsolescence of 15 percent.

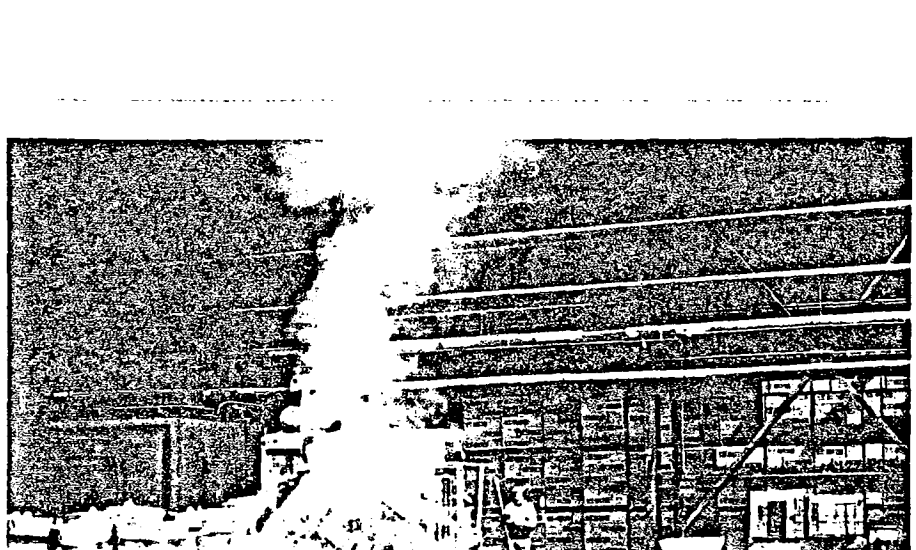
COST APPROACH (Continued)

Summary

Replacement Cost - Buildings		$37,540,397
Yard Improvements		1,474,057
		$39,014,454
Less:		
Physical Deterioration - Buildings	$16,141,090	
Yard Improvements	710,553	
		16,851,643
Depreciated Improvement Value Before Obsolescence		$22,162,811
Less:		
Functional Obsolescence - Buildings	$2,046,105	
- Basements	7,758,610	9,804,715
Depreciated Improvement Value Before Economic Obsolescence		$12,358,096
Less:		
Economic Obsolescence - 15%		1,853,714
Depreciated Value of Improvements		$10,504,382
Land Value		347,000
Total Value		$10,851,382
Rounded To		$10,851,000

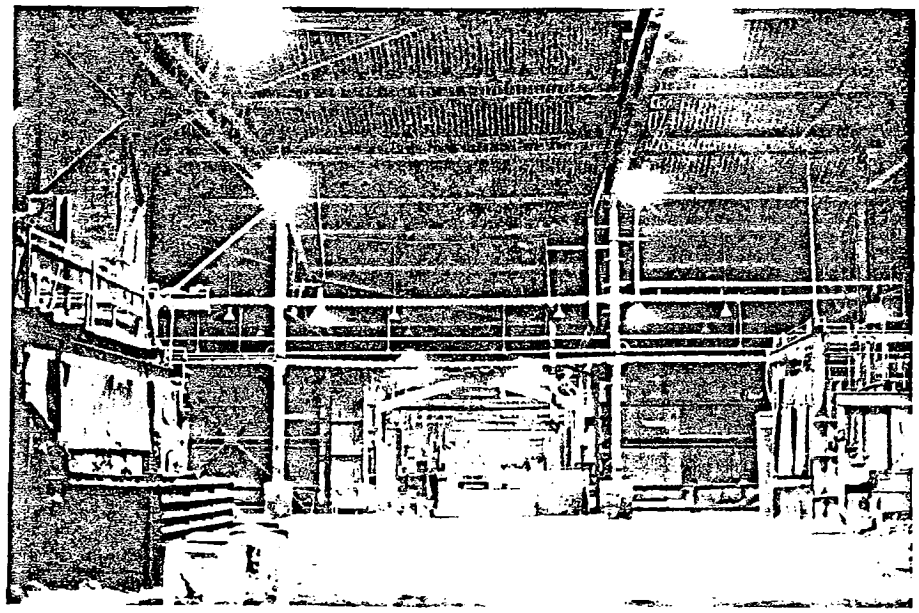
COST APPROACH (Continued)

Overall View of Subject



Interior--Casting Room

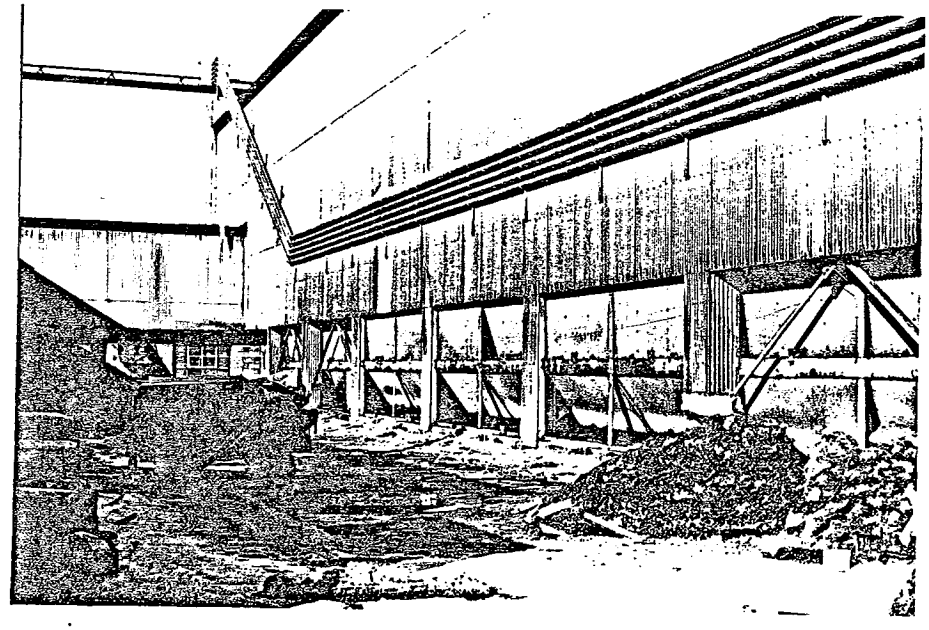
COST APPROACH (Continued)



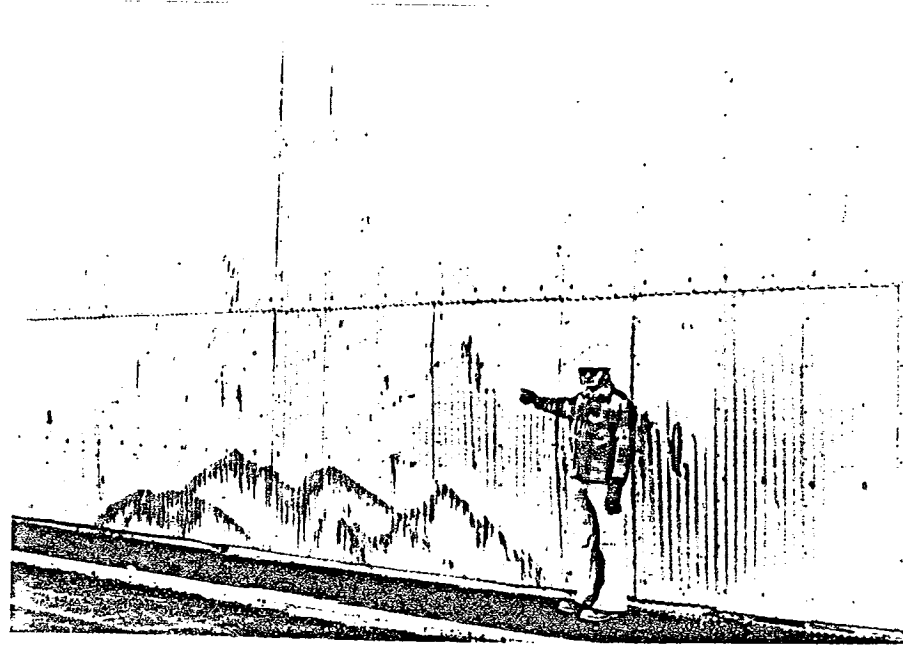
Looking at Center Passageway From Casting Room

Typical View of Pot Line Room

COST APPROACH (Continued)



Exterior View of Pot Line Rooms From Interior Courtyards



Typical Condition of Exterior Wall

INCOME APPROACH

In utilizing the Income Approach to value, the appraisers are concerned with the present worth of the future potential benefits of a property. This is generally measured by the net income which a fully informed person is warranted in assuming the property will produce during a foreseeable period. This net income is next capitalized into an estimate of value. The Income Approach requires the assembling and processing of various income and expense data, to wit:

1. Estimating a rent schedule and percentage of occupancy for the subject property. This generally provides gross rental data and trends in rental and occupancy.

2. Obtaining rent schedules, occupancy and expense analyses of comparable properties.

3. Estimating expense data and operating costs for the subject property, if possible.

4. Selecting the appropriate capitalization rate and the applicable technique for processing the net income.

Since the subject property is owner occupied, we have established an economic rental derived from the current local and regional markets on which to base a hypothetical leasing arrangement. Plants the size and composition of the subject can be leased two ways: as a single facility to a single user; or the alternative manner, subdivision to meet the needs of smaller users. Both were considered by the appraisers.

The appraisers undertook an extensive investigation of the industrial real estate market existing in the subject's immediate and regional areas. This was done because the potential user of the subject property would most likely come from either the subject's local area or one of the nearby industrialized metropolitan centers.

The first step in the Income Approach is to determine the proper economic income for the subject property.

INCOME APPROACH (Continued)

> "Market rent (or economic rent) is the rental income that a property would most probably command on the open market as indicated by current rentals being paid for comparable space (as of the effective date of appraisal)."[2]

The appraisers have, therefore, gathered some recent comparable industrial rentals and offerings which appear on the following pages.

[2]The American Institute of Real Estate Appraisers and the Society of Real Estate Appraisers, Real Estate Appraisal Terminology, Cambridge, Massachusetts, c. 1975, p. 136.

INCOME APPROACH (Continued)

Comparable Rental No. 1

Location:	Triangle Building Corner of Utah and Platinum Butte, Montana
Date:	Current (February, 1978) Month-to-Month
Lessor:	Christie Transfer and Storage Company
Lessee:	1) T. J. Lamphier 2) Cannon, Inc. 3) Vacant
Rental:	1) $137.50/Mo. x 12 = $1,650 An. Gross $ .84/Sq. Ft. Net Net 2) $155.00/Mo. x 12 = $1,860 An. Gross $ .96/Sq. Ft. Net Net 3) $285.00/Mo. x 12 = $3,420 An. Gross $ .84/Sq. Ft. Net Net
Floor Area:	1) 1,380 Square Feet 2) 1,360 Square Feet 3) 2,700 Square Feet
Comments:	This is an older, multi-purpose industrial building which has been converted to multi-tenancy.

INCOME APPROACH (Continued)

Comparable Rental No. 2

Location:	400 East Platinum Butte, Montana
Date:	Month-to-Month (February, 1978) No Lease
Lessor:	Youlden Estate
Lessee:	Golden Rule, Inc.
Rental:	$200/Mo. x 12 = $2,400 Annual Net Net $.51/Sq. Ft. Net Net (Rounded)
Floor Area:	4,732 Square Feet
Comments:	Typical small multi-purpose manufacturing, storage and distribution improvement. See Comparable Rental No. 3.

INCOME APPROACH (Continued)

Comparable Rental No. 3

Location:	400 East Platinum Butte, Montana
Date:	Month-to-Month (February, 1978)
Lessor:	Youlden Estate
Lessee:	Universal Distributors, Inc.
Rental:	$250/Mo. x 12 = $3,000 Annual Net Net $.60/Sq. Ft. Net Net (Rounded)
Floor Area:	5,070 Square Feet (Two Floors and Basement, Elevator)
Comments:	Brick office, storage, and distribution areas; older, multi-purpose industrial improvement with multi-tenants. See Comparable Rental No. 2.

INCOME APPROACH (Continued)

Comparable Rental No. 4

Location:	602 East Aluminum Butte, Montana
Date:	May, 1973 Second Five-Year Term Ending May 1, 1978 - Negotiating
Lessor:	Christie Transfer and Storage Company
Lessee:	Nabisco Corporation
Rental:	$5,700 per Annum
Floor Area:	9,640 Square Feet
Unit Rent:	$.59 per Square Foot Net
Comments:	Typical small manufacturing, storage, and distribution improvement; multi-purpose with multi-tenants. See Comparable Rental No. 5.

INCOME APPROACH (Continued)

Comparable Rental No. 5

Location:	602 East Aluminum Butte, Montana
Date:	May, 1973 Second Five-Year Term Ending May 1, 1978 - Negotiating
Lessor:	Christie Transfer and Storage Company
Lessee:	Monitor Distributing Corporation
Rental:	$6,600 per Annum
Floor Area:	10,400 Square Feet
Unit Rent:	$.64 per Square Foot
Comments:	See Comparable Rental No. 4.

INCOME APPROACH (Continued)

Comparable Rental No. 6

Location:	949 South Montana Butte, Montana
Date:	February 14, 1973 Five-Year Lease Ending June 30, 1978
Lessor:	Milwaukee Railroad - In Bankruptcy Receivership
Lessee:	Westinghouse Supply Company
Rental:	$9,300 per Annum
Floor Area:	18,620 Square Feet
Unit Rent:	$.50 per Square Foot
Comments:	This is a typical small multi-purpose industrial building with rail and truck-loading facilities. 5,880 square foot office area. Entire area is heated. Currently utilized as warehouse.

INCOME APPROACH (Continued)

Comparable Rental No. 7

Location:	Corner of Grand and Garfield Butte, Montana
Date:	November, 1972
Lessor:	Raymond Corporation
Lessee:	Coca-Cola Bottling Company
Rental:	$10,660 per Annum
Floor Area:	19,200 Square Feet
Unit Rent:	$.56 per Square Foot Net
Comments:	This is a modern metal building, 80' x 240', with air-conditioned office area, manufacturing, storage, and distribution.

INCOME APPROACH (Continued)

Comparable Rental No. 8

Location:	The Industrial Park of Butte Butte, Montana
Date:	7/1/75 to 7/1/80
Lessor:	Butte Local Development Corp.
Lessee:	Westinghouse Electric
Rental:	$15,170 per Annum
Land Area:	5.5 Acres
Building Area:	8,200 Square Feet 8.8 Percent Office Area
Unit Rent:	$1.85 per Square Foot Net
Comments:	Modern high one-story steel on steel building. Formerly occupied by General Electric at $1.85 per square foot with option to purchase at $1.85 per square foot.

INCOME APPROACH (Continued)

Comparable Rental No. 9

Location:	1200 E. Front Street Butte, Montana
Date:	Current (February, 1978)
Lessor:	Mell Otto
Lessee:	N/A
Rental:	$12,900/Annum - Lessee Pays Taxes and Insurance
Land Area:	42,023 Square Feet
Building Area:	10,725 Square Feet 22 Percent Office Area
Unit Rent:	$1.20 per Square Foot
Comments:	One-story lightweight concrete plant construction. See Comparable Sale No. 7.

INCOME APPROACH (Continued)

Comparable Rental No. 10

Location:	The Industrial Park of Butte Butte, Montana
Date:	7/1/75 (20 Year Term)
Lessor:	Butte Development Corp.
Lessee:	Ashton Printing and Engineering
Rental:	$46,816 per Annum
Land Area:	1 Acre
Building Area:	26,600 Square Feet
Unit Rent:	$1.76 per Square Foot Net
Comments:	Formerly occupied by Westinghouse at a rate of $1.85 per square foot net. Modern one-story steel on steel, manufacturing space.

INCOME APPROACH (Continued)

Comparable Rental No. 11

Location:	The Industrial Park of Butte Butte, Montana
Date:	Month-to-Month 6/4/71 - 15 Years
Lessor:	Port of Butte
Lessee:	United Parcel Service Gamble-Robins
Rental:	$1,500 per Year $30,000 per Year
Land Area:	5.5 Acres
Building Area:	7,500 Square Feet 25,000 Square Feet
Unit Rent:	$.20 per Square Foot Net $1.20 per Square Foot Net
Comments:	Modern one-story steel on steel building; light manufacturing and warehouse space. Remainder of building occupied by Lessor.

INCOME APPROACH (Continued)

Comparable Rental No. 12

Location:	800 13th Avenue, South Great Falls, Montana
Date:	1976
Lessee:	Service Auto Glass
Rental:	$8,100 per Annum Net
Land Area:	16,500 Square Feet
Building Area:	6,000 Square Feet
Unit Rent:	$1.35 per Square Foot Net
Comments:	Lease term is five years. See Comparable Sale No. 12.

INCOME APPROACH (Continued)

Comparable Rental No. 13

Location:	River Drive, Within Railroad Industrial Yard Great Falls, Montana
Date:	November 1, 1976
Lessor:	R.M.C., Inc. (Harold Paulson)
Lessee:	Owl H. C. Smith Construction Company
Rental:	$18,000 per Annum
Land Area:	1 Acre
Building Area:	12,000 Square Feet
Unit Rent:	$1.50 per Square Foot
Comments:	Lessor is responsible for structural and exterior repairs. Lease term is 21 months ending July 31, 1978 with six month renewal option at same terms. Land is owned by Burlington Northern, Inc. and leased to R.M.C., Inc. at an annual rental of $900 per month. (Burlington Northern Lease No. 221,734)

INCOME APPROACH (Continued)

Comparable Rental No. 14

Location:	38th Street and North River Road Great Falls, Montana
Date:	August 15, 1976
Lessor:	Thomas Mather Associates (Original) Patrick Paul (Present)
Lessee:	Owl H. C. Smith Construction Company
Rental:	$36,000 per Annum
Land Area:	5.08 Acres
Building Area:	30,000 Square Feet
Unit Rent:	$1.20 per Square Foot of Building Area
Comments:	Net lease expires August 14, 1978. See Comparable Sale No. 18.

INCOME APPROACH (Continued)

Comparable Rental No. 15

Location:	Former A.B.M. Missile Site Nine Miles East of Conrad, Montana
Date:	November, 1975
Lessor:	Economic Development Corporation of Pondera County
Lessee:	Cascade Coach Company
Rental:	$14,100 per Annum
Land Area:	5 Acres
Building Area:	47,000 Square Feet
Unit Rent:	$.30 per Square Foot
Comments:	Largest of five buildings comprising this former A.B.M. Missile Site which was acquired from the U. S. Government. The remaining four buildings range in size from 5,000 to 7,000 square feet and are leased at annual unit rentals of $.85 to $1.25 per square foot of building area. All leases are net of taxes, which are paid by the Lessor and amount to less than $3,000 per annum on the entire complex. The Cascade Coach lease expires in November, 1978 and the Economic Development Corporation of Pondera County has advised that upon renewal the unit rental will be increased to a unit amount of between $.85 and $1.00 per square foot, net of taxes.

INCOME APPROACH (Continued)

Comparable Rental No. 16

Location:	2600 West Broadway Missoula, Montana
Date:	September, 1976
Lessor:	John Doyle
Lessee:	Snappy Radiator
Rental:	$3,960 per Annum
Land Area:	10,000 Square Feet
Building Area:	1,536 Square Feet
Unit Rent:	$2.57 per Square Foot
Comments:	Space leased is rear portion of 4,380 square foot building. Lease is for 10 years with Lessor paying taxes, insurance and exterior maintenance. See Comparable Rental No. 17.

INCOME APPROACH (Continued)

Comparable Rental No. 17

Location:	2600 West Broadway Missoula, Montana
Date:	October, 1976
Lessor:	John Doyle
Lessee:	Petrolane Gas Service
Rental:	$6,600 per Annum
Land Area:	10,000 Square Feet
Building Area:	2,844 Square Feet
Unit Rent:	$2.32 per Square Foot
Comments:	Space leased is front portion of 4,380 square foot building. Lease is for 10 years with Lessor paying taxes, insurance and exterior maintenance. See Comparable Rental No. 16.

INCOME APPROACH (Continued)

Comparable Rental No. 18

Location:	1700-1702 Rankin Street Missoula, Montana
Date:	February, 1975
Lessor:	Keith Wright
Lessee:	Western Equipment
Rental:	$8,712 per Annum
Land Area:	8,660 Square Feet
Building Area:	5,280 Square Feet
Unit Rent:	$1.65 per Square Foot
Comments:	Space leased is a portion of 15,360 square foot building on 25,820 square feet of land. Lessee pays all utilities and Lessor pays taxes, insurance and exterior maintenance. Rental is adjusted by cost of living index every two years. Present rental is $10,860 or $2.06 per square foot. See Comparable Rental No. 19.

INCOME APPROACH (Continued)

Comparable Rental No. 19

Location:	1700-1702 Rankin Street Missoula, Montana
Date:	April, 1975
Lessor:	Keith Wright
Lessee:	Northeast Pipe and Fittings
Rental:	$17,438 per Annum
Land Area:	17,160 Square Feet
Building Area:	10,080 Square Feet
Unit Rent:	$1.73 per Square Foot
Comments:	Space leased is a portion of a 15,360 square foot building on 25,820 square feet of land. Lessee pays all utilities and Lessor pays taxes, insurance and exterior maintenance. Rental is adjusted by cost of living index every two years. Present rental is $21,408 per annum or $2.12 per square foot. See Comparable Rental No. 18.

INCOME APPROACH (Continued)

Comparable Rental No. 20

Location:	936 Strand Missoula, Montana
Date:	September, 1975
Lessor:	Val Holms (Original) Edward Flink (Present)
Lessee:	Missoula Motor Parts
Rental:	Original - $17,280 Present - $19,075
Land Area:	20,820 Square Feet
Building Area:	9,600 Square Feet
Unit Rent:	Original - $1.80 per Square Foot Present - $1.99 per Square Foot
Comments:	Net lease for a 10 year term with cost of living adjustment at two year intervals. See Comparable Sale No. 18.

INCOME APPROACH (Continued)

Comparable Rental No. 21

Location:	2801 Charlo Street Missoula, Montana
Date:	1) February 1, 1976 2) May, 1976
Lessor:	Keith Wright
Lessee:	1) General Services Administration (U. S. Forest Service) 2) Montana Oxygen & Welding Supplies
Rental:	1) $9,056 2) $5,880 per Annum
Building Area:	1) 9,240 Square Feet 2) 3,120 Square Feet 12,360 Square Feet
Unit Rent:	1) $ .98 per Square Foot 2) $1.88 per Square Foot
Comments:	Lessees pay utilities and Lessor pays taxes, insurance and exterior maintenance. GSA lease calls for monthly rental at end of the month. Lease expires July 31, 1978. Montana Oxygen lease expires April 30, 1978 and is renewable with cost of living increase.

INCOME APPROACH (Continued)

Comparable Rental No. 22

Location:	End of Charlo Street Missoula, Montana
Date:	February 1, 1976
Lessor:	Keith Wright
Lessee:	General Services Administration
Rental:	$15,054 per Annum
Building Area:	15,360 Square Feet
Unit Rent:	$.98 per Square Foot
Comments:	Lessee pays all utilities and Lessor pays taxes, insurance and exterior maintenance. Rental is paid monthly at end of month. Lease expires July 31, 1978.

INCOME APPROACH (Continued)

Comparable Rental No. 23

Location:	Moore Lane Billings, Montana
Date:	August, 1977
Lessor:	John Foote
Lessee:	Marion Power Shovel, Inc.
Rental:	$23,700 per Annum
Land Area:	52,313 Square Feet
Building Area:	10,000 Square Feet
Unit Rent:	$2.37 per Square Foot
Comments:	Steel framed metal structure containing 700 square feet of office area, minimal plumbing and space heaters. Lease is for 10 years with Lessor paying taxes, insurance and exterior repairs.

INCOME APPROACH (Continued)

Comparable Rental No. 24

Location:	Moore Lane Billings, Montana
Date:	July, 1977
Lessor:	John Foote
Lessee:	Nash Brothers, Inc. (T/A Dorn-Nash Tractors)
Rental:	$17,800 per Annum
Land Area:	50,000 Square Feet
Building Area:	10,000 Square Feet
Unit Rent:	$1.78 per Square Foot
Comments:	Steel framed metal structure with minimal office area, plumbing and space heaters. Lessor responsible for taxes, insurance and exterior maintenance.

INCOME APPROACH (Continued)

Comparable Rental No. 25

Location:	516 18th Street Billings, Montana
Date:	Mid-1976
Lessor:	Centennial Enterprises
Lessee:	Western Paper
Rental:	$21,600 per Annum
Land Area:	51,848 Square Feet
Building Area:	12,000 Square Feet
Unit Rent:	$1.80 per Square Foot Net
Comments:	One-story steel framed metal warehouse structure with dock height floors. Improvements were constructed new in 1976 at a cost of $180,000 including the land.

Extraction of Overall Capitalization Rate

Net Income		Cost-New		Overall Cap. Rate
$21,600	÷	$180,000	=	12.0%

INCOME APPROACH (Continued)

Comparable Rental No. 26

Location:	South Charleston Ordnance Depot South Charleston, West Virginia
Date:	April 1, 1974 - Term 20 Years, One 5-Year Option, Re-Leased in 1977 (See Below)
Lessor:	Ray Park, et al
Lessee:	American Motors Corporation
Rental:	$829,862 Annual Semi-Net Rental, Lessor Paid the Taxes - Approximately $.10 per Square Foot
Land Area:	34.212± Acres
Building Area:	Two Buildings 1. 922,000 Square Feet, Heavy Industrial Free-standing 2. 12,960 Square Feet, Good Grade Industrial Office
Unit Rent:	$.89 per Square Foot Semi-Net $.79± per Square Foot Net Net
Comments:	This fine, heavy, crane serviced (up to 200 tons) industrial facility, formerly an Alcoa plant, was re-leased by American Motors Corporation to Volkswagen of America (February 1, 1977). The same rental was applied for the remainder of the lease. Verified with Ray Park and an appraiser engaged by American Motors Corporation who asked to remain anonymous. He had in his possession a copy of the lease which the authors were able to examine.

INCOME APPROACH (Continued)

Comparable Rental No. 27

Location:	1700 Williamsburg Pike and Sheridan Avenue Richmond, Indiana
Date:	February, 1978
Lessor:	D & M Corporation
Lessee:	Any Good Credit Concern
Rental:	Asking $1.00 per Square Foot Gross
Land Area:	99± Acres
Building Area:	1,000,000 Square Feet
Unit Rent:	$.70 per Square Foot Net Net
Comments:	A large, single-story, high-bay crane serves the heavy manufacturing facilities. Clear ceiling heights are up to 30 feet. There are 125,000 square feet of good grade office, data processing, cafeteria, conference rooms, training rooms and engineering laboratory areas; all are air conditioned. The facility has heavy power service, paved parking areas for 1,500 cars and eight railroad sidings that tie into the Penn Central and C&O Railroads. This property has been offered to the market since 1974 with about 40 percent leased to multi-tenants.

INCOME APPROACH (Continued)

Comparable Rental No. 28

Location:	6565 East 8 Mile Road, Corner of Sherwood Adjacent to the Subject Property Warren, Michigan
Date:	Rental Commenced September 1, 1968 Term: 10 year lease, 4-5 year options all at the same rate. Chrysler Real Estate Department indicated that they would not pay more for the property as industrial rentals have not increased in the area.
Lessor:	R. C. Mahon Corporation
Lessee:	Chrysler Corporation
Rental:	$575,000 Net Net, $.51 per Square Foot Net Net
Age:	25+ Average Years
Floor Area:	1,120,000± Square Feet, Three Major Buildings
High Bay Steel Crane Serviced:	400,000± Square Feet (Including 111,000± Square Feet Office Area)
	294,000± Square Feet
	331,000± Square Feet
Small Service Building:	95,000± Square Feet
Land Area:	Basic plant site is 59.04 acres, inside the fence. Total area including parking and auxiliary lots is 71.38 acres.

INCOME APPROACH (Continued)

Comparable Rental No. 28 (Continued)

Comments:

Since the rental commenced in 1968, there is a ten year time factor, however, knowledgeable appraisers and industrial brokers in the Warren general area, in particular Don Hartman, M.A.I., S.I.R., indicate industrial property values and rentals have not enjoyed the appreciation trend experienced by other types of real property. Discussions held with the Real Estate Department of Chrysler indicate that Chrysler did not exercise its option to purchase the comparable which expired in 1975 and that they would not have paid more than $.51 net net net rental for comparable space within the review period.

The option price was set at $7,750,000 that equates to $6.91 per square foot of building area for land and improvements.

See Comparable Sale No. 35.

INCOME APPROACH (Continued)

Comparable Rental No. 29

Location:	First Avenue, New Kensington and Arnold Westmoreland County, Pennsylvania
Date:	January 1, 1972 for 10 Years
Lessor:	Schreiber Industrial District
Lessee:	Alcoa, Central Machine Division
Rental:	Manufacturing Area 156,300 Square Feet - $100,000 Annual Net Rental Metal Testing and Research 143,305 Square Feet -$100,000 Annual Net Rental
Land Area:	63± Acres for the Entire Complex
Building Area:	2,041,624 Square Feet, 27 Buildings
Unit Rent:	Manufacturing Area - $.64 per Square Foot Net Rental Metal Testing Area - $.70 per Square Foot Net Rental
Comments:	Typical heavy industrial, metal producing facility. The buildings have heavy reinforced concrete foundations and floors. Some still have the wooden block floors found in heavy metal producing structures. Very heavy crane supporting steel frames in the large steel buildings. This plant has river frontage with bulkheads on the Allegheny River. Clear ceiling heights up to 50 feet in the crane served buildings. The rentals charged to other tenants are in line with those charged to Alcoa according to Mr. Schreiber.

See Comparable Sale No. 41.

INCOME APPROACH (Continued)

An investigation of the industrial real estate market in the Columbia Falls/Kalispell area did not reveal any rentals of industrial property. Further, in analyzing the industrial rental market in the industrialized centers of the State it was observed that the unit rentals obtained had a direct bearing on the amount and type of industrial activity conducted.

The rentals obtained were for space substantially smaller in size than the subject, with the largest of the units leased being less than one percent the size of the subject. In addition, the space leased is predominantly in light industrial metal buildings which are prevalent throughout the State. Also, the appraisers have concluded that should the subject be placed on the market for rent, the amount of space within its borders could not conceivably be absorbed by the other industrial users within the area or within the State.

The design and physical characteristics of the subject make it extremely difficult to subdivide the buildings into separate rental units. Therefore, the ultimate lessee of the space would be a single industrial user. The space would be in direct competition with the other large industrial complexes throughout the country that are presently available for lease.

Having analyzed a number of large industrial rentals throughout the country, the appraisers have concluded that the maximum rental obtainable would be $.75 per square foot per annum, on a net basis, with the basement space excluded.

Therefore:

	2,653,249	Square Feet - Gross Area
Less	990,404	Square Feet - Basement Area
	1,662,845	Square Feet - Rentable Area

1,662,845 SF @ $.75/SF = $1,247,134

INCOME APPROACH (Continued)

Capitalization Rate Analysis

The final step in the Income Approach is capitalization which is "the process of correcting into present value (or obtaining the present worth of) a series of anticipated future periodic installments of net income."

The appraisers have researched the market in order to obtain the necessary information required to utilize that method most commonly employed to measure the present worth of the future benefits of the income stream, as projected for industrial office, research and manufacturing complexes similar to the subject under review. The property residual technique is applied by the utilization of an overall rate which was composed of the mortgage and equity band of investment. In the event of a sale of similar properties, a typical lender would most likely be a commercial bank, insurance company or trust.

The economic recession which was in full swing in the last half of 1974, all of 1975, 1976, and which was still being felt in late 1977 in Montana had less effect on the industrial mortgage market than it did on the commercial and residential oriented lenders.

The industrial lenders base their mortgage rates on the Moody's Investors Service--Corporate AAA Bond Rates. Traditionally, they have provided industrial mortgages for a rate which carried an interest rate of one percent to one and one-half percent over the Moody's AAA Corporate Bond Rates as published. The authors have included in this section of this report, a graph prepared by the Federal Reserve Bank of St. Louis, which displays vividly the stability of the aforementioned rates in contrast to the drastic fluctuations of the prime commercial loan rates.

INCOME APPROACH (Continued)

Capitalization Rate Analysis (Continued)

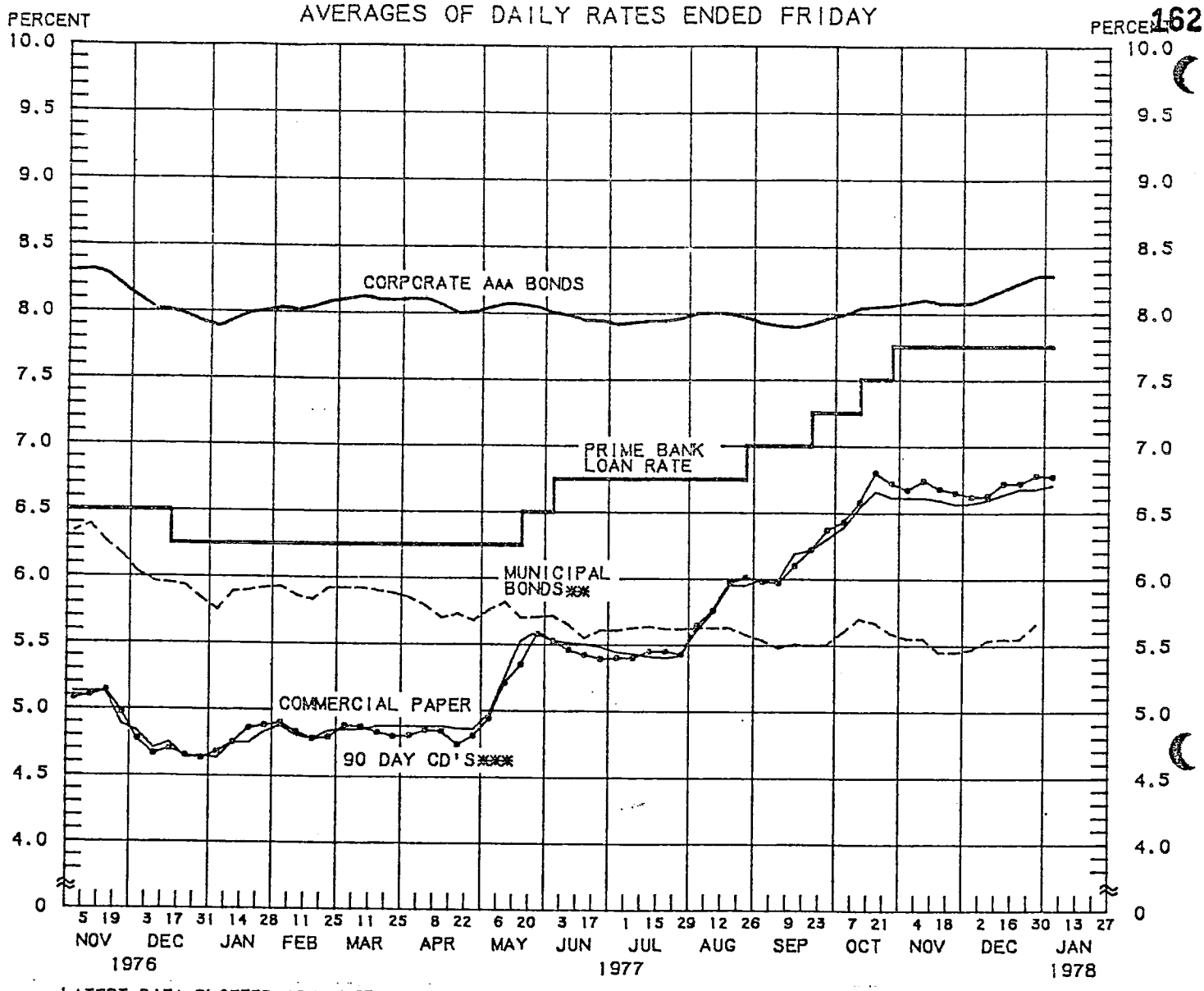
The industrial lenders while charging a slightly higher rate during the time period under review, sought to make the effects of the higher rates insignificant by extending the term of the loans to 20 years, however, they also included in the mortgages a ten-year call which would enable them to secure the return of their placed capital in a shorter period should they desire it. These changes in basic industrial mortgage structure were deemed necessary by the industrial lenders who were disenchanted by the high rate of failures and foreclosures in the other mortgage markets.

The equity position investors also were desirous of protecting their investments in their well-secured industrial real estate markets and they were willing to lower slightly the yield to equity in order to obtain stability and tenant financial strength.

The concluded result was a slight reduction in the overall capitalization rate as indicated in this report by the appraisers' overall rate selection and support.

YIELDS ON SELECTED SECURITIES

AVERAGES OF DAILY RATES ENDED FRIDAY



LATEST DATA PLOTTED ARE AVERAGES OF RATES AVAILABLE FOR THE WEEK ENDING: JANUARY 6, 1978

1978	90 DAY CD'S ***	PRIME COMMERCIAL PAPER 4-6 MONTH	PRIME BANKERS' ACCEPTANCES	CORPORATE AAA BONDS	MUNICIPAL BONDS **
NOV. 4	6.67	6.61	6.69	8.08	5.55
11	6.74	6.61	6.66	8.10	5.55
18	6.68	6.59	6.57	8.07	5.45
25	6.65	6.56	6.51	8.07	5.45
DEC. 2	6.62	6.57	6.46	8.08	5.47
9	6.63	6.60	6.55	8.13	5.54
16	6.72	6.64	6.57	8.18	5.55
23	6.72	6.68	6.65	8.23	5.55
30	6.78	6.68	6.71	8.28	5.66
JAN. 6 *	6.77	6.71	6.71	8.28	N.A.
13					
20					
27					

* AVERAGES OF RATES AVAILABLE.
** BOND BUYER'S AVERAGE INDEX OF 20 MUNICIPAL BONDS, THURSDAY DATA.
*** SEVEN-DAY AVERAGES OF SECONDARY MARKET RATES FOR THE WEEK ENDING WEDNESDAY TWO DAYS EARLIER THAN DATES SHOWN. CURRENT DATA APPEAR IN THE BOARD OF GOVERNORS' H.9 RELEASE.
N.A. - NOT AVAILABLE

PREPARED BY FEDERAL RESERVE BANK OF ST. LOUIS

INCOME APPROACH (Continued)

Capitalization Rate Analysis (Continued)

The appraisers have discussed the financing of comparable properties with active, knowledgeable investors and lenders. Assuming competent management and reasonably secure, responsible tenants, at the date of appraisal, a mortgage of 18 to 20 years was available for approximately 70 percent of appraised value with an effective interest rate range of eight and one-half percent to nine and one-half percent. The investor for the equity position would be seeking a cash flow return of 12 to 14 percent on invested equity capital.

Band of Investment

70% Mortgage at 9.50% Interest
20 Year Term = .11196 Constant (Annual)

Mortgage	70% x .11196 =	7.837%
Equity	30% x .14 =	4.20 %
Overall Rate		12.037%
Rounded To		12.00%

This capitalization rate is further supported by the capitalization rates extracted from sales within the State of Montana as shown in this and the Market Data Approach sections of this report.

Process

The income stream for the property can now be converted into value by dividing it by the total overall capitalization rate. Therefore:

Net Income	÷ Overall Rate	= Value
$1,247,134	÷ .1200	= $10,392,783
Rounded To		$10,393,000

Value Indication via Income Approach

$10,393,000

MARKET DATA APPROACH

The Market Data Approach is based on the premise that the informed prudent and rational purchaser (investor or user) applying the principle of substitution will pay no more for a property than the cost to him of acquiring a similar competitive property with the same utility as of the valuation date. The approach is predicated on the assumption that there is, in fact, an active market for the type of property being appraised; and that data on recent sale prices of similar competitive properties on the same market, representing bonafide arms length transactions are an appropriate guide to the market value of the subject property.

Application of the Market Data Approach requires the comparing and rating of other comparable properties to the property appraised. That is, to develop indications of what they would have sold for if they had possessed all of the basic and pertinent physical and economic characteristics of the subject property. Indications of such adjusted sale prices are developed for several comparable sales. These indications hopefully fall into a pattern clustering around one figure which when appropriately rounded provides an indication of the market value of the subject property as of the date of appraisal.

In addition, the Market Data Approach takes into account such important but frequently overlooked market elements as the effect of financing terms on sale prices and sale commissions. Market price is the basic guide to market value in the Market Data Approach. It includes whatever constitutes the cost to the typical informed purchases.

Sales of industrial properties as they appear on the following pages, have been assembled for the purpose of providing a comparative basis for the value estimate of the subject property.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 1

Location:	712 East Front Street Butte, Montana
Date:	January 4, 1972
Grantor:	William J. Egan, et al
Grantee:	Beebe Grain Company
Sale Price:	$40,000
Land Area:	4,320± Square Feet
Building Area:	12,960± Square Feet - Total Area 4,320± Square Feet - Ground Floor Area
Unit Price:	$3.09 per Square Foot of Building Area Including the Land
Comments:	Two-Story Masonry Building; 30 Years Old; Good Office Area; All Floors Heated; One Freight Elevator; Railroad Siding and Truck Dock Loading

MARKET DATA APPROACH (Continued)

Comparable Sale No. 2

Location:	390 Holmes Avenue Butte, Montana
Date:	April 13, 1972
Grantor:	Sigman's
Grantee:	Eugene and JoAnn Spolar
Sale Price:	$45,000
Land Area:	64.126± Acres
Building Area:	15,536± Square Feet
Unit Price:	$2.90 per Square Foot of Building Area Including the Land
Comments:	24' Ceiling Heights; Metal Buildings; Poor Condition Currently leased to Summit Valley Industries, Incorporated. They produce modular homes.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 3

Location:	1025 South Montana Butte, Montana
Date:	June 28, 1973
Grantor:	Fuller-O'Brien
Grantee:	J. Kirby
Sale Price:	$70,000
Land Area:	1± Acre (47,000± Square Feet)
Building Area:	17,920± Square Feet - Total Ground 8,960 Square Feet - Ground Floor Area
Unit Price:	$3.90 per Square Foot of Building Area Including the Land
Comments:	Two-Story Reinforced Concrete and Brick Multi-Purpose Structure Approximately 36 Years Old; All Areas Heated; Sprinklered; Improved Display Area; Rail and Truck Loading Docks

MARKET DATA APPROACH (Continued)

Comparable Sale No. 4

Location:	Arizona Street and Great Northern Railroad Butte, Montana
Date:	March 16, 1973
Grantor:	Great Northern Railroad, Inc.
Grantee:	Cobra Tire Values, Inc.
Sale Price:	$40,000
Land Area:	Two Parcels - 2.99± Acres 2.08± Acres (Rear)
Building Area:	19,389± Square Feet
Unit Price:	$2.06 per Square Foot of Building Area Including the Land
Comments:	General Multi-Purpose Structure; Heavy Construction - Concrete and Brick; Some Buildings - Wooden and Metal; Former Railroad Station and Warehouse

MARKET DATA APPROACH (Continued)

Comparable Sale No. 5

Location:	800 South Wyoming Butte, Montana
Date:	May 1, 1968
Grantor:	Ryan Butte
Grantee:	George Steele Company
Sale Price:	$35,000
Land Area:	1.5± Acres
Building Area:	39,000± Square Feet - Total Area 9,800± Square Feet - Ground Floor Area
Unit Price:	$.90 per Square Foot of Building Area Including the Land
Comments:	Three-Story Masonry Building; Approximately 70 Years Old; Four Refrigerated Cold Rooms; One Four-Stop Freight Elevator; All Floors Heated; Railroad Siding and Truck Dock Loading

MARKET DATA APPROACH (Continued)

Comparable Sale No. 6

Location:	Butte Industrial Park Butte, Montana
Date:	October 3, 1973
Builder:	Local General Contractors (Various)
Grantor:	Port of Butte
Sale Price:	$582,000
Land Area:	No Land Involved
Building Area:	85,000± Square Feet
Unit Price:	$6.85 per Square Foot of Building Area (Building Only)
Comments:	Insulated Steel Building; Modern Design, 18' Side Wall, 32 Feet at Center; Fully Sprinklered; 20 Overhead Loading Doors; 3,000 SF Air-Conditioned Office Area; Building Totally Heated

MARKET DATA APPROACH (Continued)

Comparable Sale No. 7
(Offering)

Location:	1200 East Front Street Butte, Montana
Date:	Current (February, 1978)
Grantor:	Mell Otto
Asking Price:	$133,800
Land Area:	42,023 Square Feet or .965 Acres
Building Area:	10,725 Square Feet - 22 Percent Office Area
Unit Price:	$12.48
Comments:	Newer one-story lightweight concrete block construction. See Comparable Rental No. 9.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 8
(Offering)

Location:	Front Street Butte, Montana
Date:	Current (February, 1978)
Grantor:	Roberts Rocky Mountain Equipment Company
Asking Price:	$275,000
Land Area:	5 Acres
Building Area:	44,000 Square Feet 3,000 Square Feet - Adjacent Freestanding Building 47,000 Square Feet - Total Area
Unit Price:	$5.85 per Square Foot
Comments:	Two One-Story Buildings; 10 Years Old; Steel on Steel Construction

MARKET DATA APPROACH (Continued)

Comparable Sale No. 9

Location:	2315 11th Avenue South Great Falls, Montana
Date:	June, 1975
Grantor:	Milford Palmer
Grantee:	Ben Reinstein, et al
Sale Price:	$60,000
Land Area:	10,000 Square Feet
Building Area:	4,800 Square Feet
Unit Prices:	$12.50 per Square Foot of Building Area Including the Land
Comments:	One-Story Steel Framed Metal Building

MARKET DATA APPROACH (Continued)

Comparable Sale No. 10

Location:	807 2nd Street South Great Falls, Montana
Date:	March 5, 1976
Grantor:	A & I Distributing Company
Grantee:	Robert & Shirley Burtchard
Sale Price:	$48,000
Land Area:	7,500 Square Feet
Building Area:	5,000 Square Feet
Unit Price:	$9.60 per Square Foot of Building Area Including the Land
Comments:	One-story lightweight, steel framed, masonry structure which shares a party wall with adjoining building to the north. Interior is divided into warehouse and shop areas. Building has small office area. See Comparable Sale No. 11.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 11

Location:	807 Second Street South Great Falls, Montana
Date:	July, 1977
Grantor:	Robert and Shirley Burtchard
Grantee:	Joanna's Ceramic Supply
Sale Price:	$70,000
Land Area:	7,500 Square Feet
Building Area:	5,000 Square Feet
Unit Price:	$14.00 per Square Foot of Building Area Including the Land
Comments:	Resale of Comparable Sale No. 10.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 12

Location: 800 Thirteenth Avenue South
Great Falls, Montana

Date: Under Contract December, 1977

Grantor: N/A

Grantee: Del Voeghle, et al

Sale Price: $75,000

Land Area: 16,500 Square Feet

Building Area: 6,000 Square Feet

Unit Price: $12.50 per Square Foot of Building Area Including the Land

Comments: Two steel framed metal buildings with overhead garage doors designed for use as an automobile service center.

Property was leased at time of sale at an annual net rental of $8,100.

Extraction of Overall Capitalization Rate

Net Income		Sale Price		Overall Cap. Rate
$8,100	÷	$75,000	=	10.8%

See Comparable Rental No. 12.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 13

Location:	404-420 Third Avenue South Great Falls, Montana
Date:	June, 1976
Grantor:	Rooney
Grantee:	Montana Hatcheries
Sale Price:	$80,000
Land Area:	15,000 Square Feet
Building Area:	12,500 Square Feet
Unit Price:	$6.40 per Square Foot of Building Area Including the Land
Comments:	One-story concrete block building with 6,250 square foot cold storage area. Balance of space includes office, shop and warehouse sections. When Montana Hatcheries purchased the property, Pepsi-Cola Bottling Company had several months remaining on its lease. After Pepsi-Cola vacated the premises, Montana Hatcheries was denied a variance for its intended use of the property as a mill. The property has been on the market since January, 1977 at $85,000 ($6.80 per square foot).

MARKET DATA APPROACH (Continued)

Comparable Sale No. 14

Location:	317 Second Street South Great Falls, Montana
Date:	August, 1975
Grantor:	Yeoman Realty
Grantee:	A&I Distributors of Great Falls
Sale Price:	$58,600
Land Area:	20,400 Square Feet
Building Area:	15,000 Square Feet
Unit Price:	$3.91 per Square Foot of Building Area Including the Land
Comments:	Older two-story brick warehouse with a rear shipping dock and some finished office space.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 15

Location:	38th Street and North River Road Great Falls, Montana
Date:	Late 1976
Grantor:	Thomas Mather Associates
Grantee:	Patrick Paul
Sale Price:	$185,000
Land Area:	5.08 Acres
Building Area:	30,000 Square Feet
Unit Price:	$6.17 per Square Foot of Building Area Including the Land
Comments:	Modern insulated metal, steel framed, industrial building with 24' ceiling height, overhead cranes and concrete radiant heated floors. Located in a modern industrial area with excellent vehicular access. Site is served by rail. Property leased at time of sale for $36,000 net per annum.

Extraction of Overall Capitalization Rate

Net Income		Sales Price		Overall Cap. Rate
$36,000	÷	$185,000	=	19.45%

See Comparable Rental No. 14.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 16

Location:	Southwest Corner of Second Street South and Second Avenue South Great Falls, Montana
Date:	January, 1977
Grantor:	Divine and Asseltine
Grantee:	Guy Marble
Sale Price:	$129,500
Land Area:	19,500 Square Feet
Building Area:	31,500 Square Feet
Unit Price:	$4.11 per Square Foot of Building Area Including the Land
Comments:	Corner property with outside rail dock on 2nd Street is comprised of two attached building structures. Main building is a two-story and basement brick warehouse with a freight elevator. Smaller building is one-story brick and tile warehouse with dock height floor and indoor loading area.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 17

Location:	401-409 Catlin Missoula, Montana
Date:	June, 1976
Grantor:	Bossard, Maddux & High
Grantee:	Consolidated Services (Ron A. Bowler)
Sale Price:	$100,000
Land Area:	16,800 Square Feet
Building Area:	8,100 Square Feet
Unit Price:	$12.35 per Square Foot of Building Area Including the Land
Comments:	Single-story steel framed metal structure with 20' height used entirely as warehouse space.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 18

Location:	936 Strand Missoula, Montana
Date:	December, 1977
Grantor:	Val Holms
Grantee:	Edward Flink
Sale Price:	$187,000
Land Area:	20,820 Square Feet
Building Area:	9,600 Square Feet
Unit Price:	$19.48 per Square Foot of Building Area Including the Land
Comments:	Modern metal Varco building improved with retail and warehouse space. Property leased to Missoula Motor Parts at time of sale at an annual net rental of $19,075 per annum.

Extraction of Overall Capitalization Rate

Net Income		Sales Price		Overall Cap. Rate
$19,075	÷	$187,000	=	10.2%

See Comparable Rental No. 20.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 19

Location:	3110 South Reserve Street Missoula, Montana
Date:	September, 1975
Grantor:	Reserve Street Builders
Grantee:	Guardian Land Company
Sale Price:	$159,000
Land Area:	28,575 Square Feet
Building Area:	15,000 Square Feet
Unit Price:	$10.60 per Square Foot of Building Area Including the Land
Comments:	One-story steel framed concrete block warehouse building and showroom. Leased at time of sale at gross annual rental of $19,200.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 20

Location:	1600 North Avenue West Missoula, Montana
Date:	August, 1976
Grantor:	First Bank of Boston
Grantee:	Western Broadcasting
Sale Price:	$735,000
Land Area:	6.39 Acres
Building Area:	144,000 Square Feet
Unit Price:	$5.10 per Square Foot of Building Area Including the Land
Comments:	Predominately single-story, steel framed block and brick, light manufacturing, storage and distribution facility with rail. Structure needed roof repairs and maintenance estimated between $250,000 and $275,000.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 21

Location: 402 South 28th Street
Billings, Montana

Date: November, 1977

Grantor: Steven Vavra

Grantee: Donald Huard and David Veder

Sale Price: $93,500

Land Area: 9,240 Square Feet

Building Area: 7,350 Square Feet

Unit Price: $12.72 per Square Foot of Building Area Including the Land

Comments: Single-story brick structure, 10' high with 6,824 square feet of warehouse and 526 square feet of office area. Building is approximately 25 years old and has been continuously leased to Gates Rubber Company. The present term of the lease expires August 31, 1978. The annual rental at the time of sale amounted to $14,700. The landlord is required to pay only taxes under the terms of the lease, which at the time of sale amounted to $867.25 per annum.

Extraction of Overall Capitalization Rate

Net Income		Sale Price		Overall Cap. Rate
$13,833	÷	$93,500	=	14.79%

MARKET DATA APPROACH (Continued)

Comparable Sale No. 22

Location:	1430 Highway 37 East Lockwood (Billings), Montana
Date:	October, 1976
Grantor:	Billings Tank, Incorporated
Grantee:	Beall, Incorporated
Sale Price:	$266,000
Land Area:	5.519 Acres
Building Area:	15,799 Square Feet
Unit Price:	$16.83 per Square Foot of Building Area Including the Land
Comments:	One-story steel framed, corrugated metal structure containing an office and shop area. The land is subject to a 40 foot ditch easement which affects approximately 1 acre. Parcel is irregular in shape and is above road grade. Available utilities include water, gas, electricity and telephone.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 23

Location:	520 Charles Street Billings, Montana
Date:	February, 1978
Grantor:	Kraft Company
Grantee:	Gordon Volte and B & B Cold Storage, Inc.
Sale Price:	$255,000
Land Area:	80,000 Square Feet
Building Area:	23,361 Square Feet
Unit Price:	$10.92 per Square Foot of Building Area Including the Land
Comments:	One-story masonry structure containing 18,511 square feet of warehouse space and 2,610 square feet of offices. 4,294 square feet of the warehouse area is comprised of refrigerated space. The main structure contains three loading areas. Two metal yard buildings containing 960 square feet and 1,280 square feet are situated along the southern end of the site.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 24

Location:	108 Moore Lane Billings, Montana
Date:	November, 1977
Grantor:	Save Way Gas Company
Grantee:	ITT Grinell-National Temperature Control Division
Sale Price:	$240,000
Land Area:	45,000 Square Feet
Building Area:	35,640 Square Feet
Unit Price:	$6.73 per Square Foot of Building Area Including the Land
Comments:	Single-story corrugated metal structure in good condition.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 25

Location:	1645 Belknap Avenue Billings, Montana
Date:	August, 1977
Grantor:	Gamble-Skogmo, Incorporated
Grantee:	Motor Parts Warehouse
Sale Price:	$800,000
Land Area:	10.16 Acres Includes 5 Acres of Additional Land
Building Area:	72,500 Square Feet
Unit Price:	$11.03 per Square Foot of Building Area Including the Land
Comments:	Concrete block, light industrial building constructed in 1956 and 5,500 square feet air conditioned office and service area. Warehouse and shop area has suspended gas-fired space heaters, five railroad and five truck loading docks plus two drive-in truck doors. Gamble-Skogmo had been occupying the property under a sale leaseback with Prudential Insurance Company entered in 1956 for an initial 26 year term expiring in 1982 at an annual net rental of $.35 per square foot ($25,375) and with 5 five year renewals at annual net rentals of $.15 per square foot ($10,875). Gamble-Skogmo exercised a purchase option in the lease and acquired title to the premises and 133,000 square feet of land from Prudential in July, 1977 for $290,000.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 26
(Offering)

Location:	Docks Road Near U. S. Route 130 and Exit 8A of the New Jersey Turnpike South Brunswick, New Jersey
Date:	Current Offering - on Market 5 Years (March, 1978)
Grantor:	Phelps Dodge
Grantee:	Not Available
Asking Price:	$5,500,000
Land Area:	216 Acres of Which 80 Acres are Additional Land Valued at $20,000 per Acre
Building Area:	636,000 Square Feet
Unit Price:	$8.65 per Square Foot of Building Area - Entire Parcel $6.13 per Square Foot of Building Area - Excluding Additional Land
Comments:	This heavy manufacturing complex, constructed between 1958 and 1964, is all one-story brick and metal and contains 492,000 square feet of manufacturing space, 120,000 square feet of warehouse space and 24,000 square feet of first class office space. Ceiling heights range from 20' clear in the warehouse area to 33' clear in the manufacturing area which has a 20 crane capacity ranging from 5 to 25 tons. There is an interior rail loading area capable of handling 4 cars at floor level and an exterior 7 car platform area. Further, there are 11 interior tailboard loading docks with levelators, 4 exterior tailgates and 2 drive-in doors.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 26 (Continued)

Comments:
(Continued)

The site is served by all utilities and has heavy electric power of 16,000 KVA. There is a 150,000 gallon water storage tank plus an extensive water recirculating system. Plant heating is by gas-fired unit heaters. The entire warehouse and 40 percent of the manufacturing area are sprinklered.

The main plant was built in 1958 and the warehouse in 1964. There is a fully equipped 7,200 square foot cafeteria and paved parking is provided for 360 cars.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 26

MARKET DATA APPROACH (Continued)

Comparable Sale No. 27

Location:	Southeast Corner Chester Pike and Simpson Avenue Eddystone, Pennsylvania
Date:	January, 1973
Grantor:	Armour Realty (Parent of Baldwin-Lima-Hamilton Corporation)
Grantee:	Adwin Realty (Subsidiary of Philadelphia Electric Company)
Sale Price;	$2,304,000
Land Area:	54.75 Acres
Building Area:	700,100 Square Feet
Unit Price:	$3.29 per Square Foot of Building Area Including the Land
Comments:	Three one-story buildings constructed between 1920 and 1950 situated along the Crum Creek bulkhead off the Delaware River. The complex has 24' x 80' bays with ceiling heights ranging from 30' to 44' so as to accommodate 56 overhead cranes ranging from 5 to 120 tons. Buildings have heavy steel frames, gabled or monitor roofs, hollow tile and steel sash walls. In addition to being served by rail the property is in close proximity to the I-95 and I-476 Interchange. Condition of the property is fair.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 27

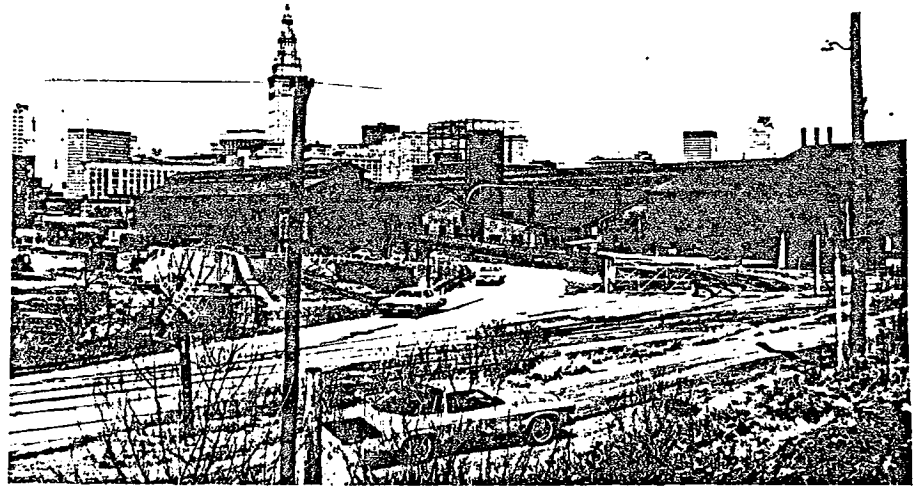
MARKET DATA APPROACH (Continued)

Comparable Sale No. 28

Location:	South of Carter Road, Along Cuyahoga River West of Scranton Road Cleveland, Ohio
Grantor:	Republic Steel Corporation
Grantee:	Fred L. Alpert
Date of Sale:	April 2, 1973
Sale Price:	$1,500,000
Land Area:	22.786 Acres
Building Area:	761,339 Square Feet
Unit Price:	$1.97 per Square Foot
Constructed:	1910-1941
Comments:	Mostly one-story with some small two- to six-story buildings. Typical iron clad steel mill-type structures. Buildings have high ceilings, wide bays, many cranes and truck docks, rail spurs, as well as extensive Cuyahoga River frontage.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 28



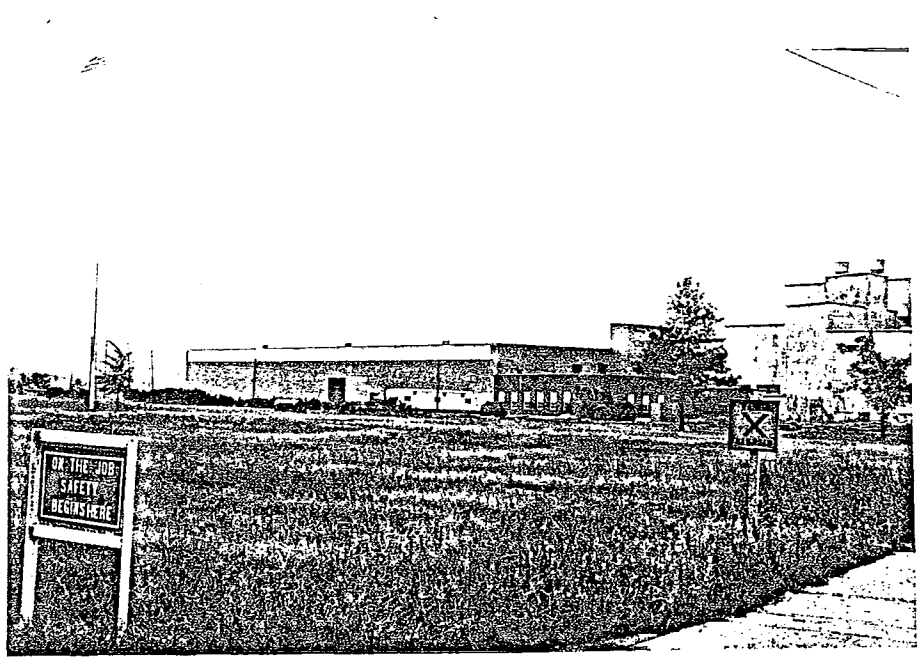
MARKET DATA APPROACH (Continued)

Comparable Sale No. 29

Location:	South Side Burlington-Bristol Bridge Burlington Township, New Jersey
Date:	July 13, 1977
Grantor:	General Services Administration
Grantee:	City of Burlington
Sale Price:	$1,317,000
Land Area:	68± Acres
Building Area:	825,000 Square Feet
Unit Price:	$1.60 per Square Foot of Building Area
Comments:	This property, the former Burlington Ammunition Depot, was declared surplus by the Federal Government (General Services Administration) in October, 1975 and in December, 1975 a contract of sale was entered into by the above parties. The property contained approximately 825,000 square feet of building area of which 600,000 square feet was usable.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 29



MARKET DATA APPROACH (Continued)

Comparable Sale No. 30

Location:	Miller and Walker Roads Avon Lake, Ohio
Grantor:	Fruehauf Corporation
Grantee:	Ford Motor Company
Date of Sale:	November 29, 1972
Sale Price:	$4,377,500
Land Area:	165.78 Acres
Building Area:	840,703± Square Feet
Unit Price:	$5.21 per Square Foot
Constructed:	1947
Comments:	64-foot bays with one 83-foot bay. Subject overall is older and larger. Typical steel frame, metal siding. Ceiling height is 20' to 22', bridge cranes one 20-ton and two 5-ton, rail and truck docks.

This comparable constitutes one of the largest manufacturing plants to be sold in Northern Ohio in over 25 years. Details of the location, type of construction, age, and general uses are as follows:

Location:	City of Avon Lake, Lorain County, Ohio, with over five miles of Lake Erie shoreline; 19 miles westerly of Cleveland. City operates its own water plant (9,000,000 gallons of water per day) and sewage plant. Population in excess of 12,000.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 30 (Continued)

Land: 165 acres of level, well-drained land, bounded on north by Walker Road with about 1,410 feet of frontage and on the east by Miller Road with about 4,900 feet of frontage.

Buildings: (Constructed in 1947) (Letters Keyed to Site Plan)

A. Office Building--Two-stories and basement, brick and stone, 44 feet by 162 feet or 21,300 square feet. Air Conditioned.

B. Office Annex--One-story, brick, 99 feet x 264 feet or 26,100 square feet. Air conditioned. Also used for cafeteria and dispensary.

C. Manufacturing Plant--One-story, 790,000 square feet. 22 feet clear ceiling height. Walls are Robertson Q-panel and continuous sash. Three longitudinal monitors. Bay sizes 50 feet by 64 feet, except bays along westerly wall, 50 feet by 83 feet, to accommodate rail within plant. Building dimensions 405 feet by 1,810 feet plus extension of same construction 130 feet by 451 feet. Three- to five-ton hoists, as shown on Floor Plan.

D. One-Story Building--50 feet by 100 feet or 5,000 square feet. Walls and roof are corrugated steel. Unheated.

E. One-Story Building--67 feet by 218 feet or 14,600 square feet. Walls are 35 feet high double corrugated steel. Through rail. Ten-ton crane.

F. One-Story--Concrete block, 228 feet by average 55 feet or 12,500 square feet. Drive-through doors. Fifteen-foot walls.

Parking: Blacktop paving for 245 cars. Slag parking for over 2,000 cars.

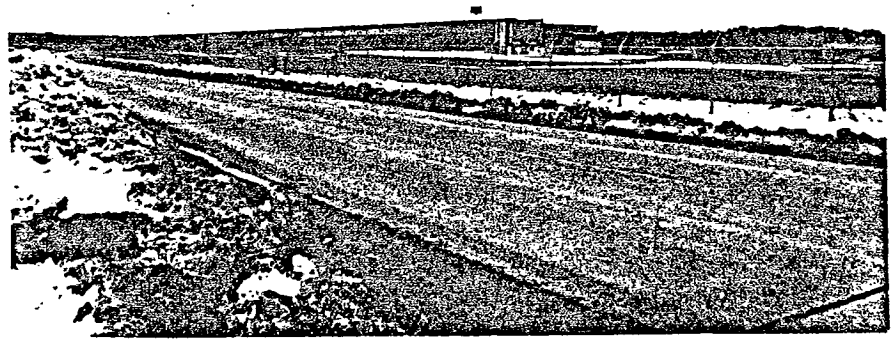
MARKET DATA APPROACH (Continued)

Comparable Sale No. 30 (Continued)

Rail:	Spurs from Norfolk & Western Railway Company extend along westerly line of property 4,300 feet and enter manufacturing plant at two points, extending inside along westerly wall through plant and beyond 400 feet.
Truck Access:	Seven truck wells recessed through west wall of manufacturing plant for 27 trailers. Ten drive-in openings in plant.
Compressed Air:	Two 100 psi main lines extend longitudinal through manufacturing plant with branch lines.
Lighting:	Principally, incandescent in manufacturing plant supplemented by natural light through three monitors.
Heating:	Oil-fired 190 lb. pressure boilers, two of 45,000 lbs. per hour capacity each, and one of 60,000 lbs. with capacity for process steam.
Power:	The Cleveland Electric Illuminating Company provides primary service at 33 KV. Plant distribution is 4160 volts--three phase and 120/208 volts--single phase. The company, through its Avon Lake Generating Plant and interconnections, can supply any anticipated load.
Fire Protection System:	Sixty percent of manufacturing plant sprinklered. Hydrant system around plant. 1000 gpm centrifugal fire pump and 150,000 gallon steel water storage tank.
Fencing:	Six-foot woven and barbed wire fence encloses property except the southerly unimproved 35 acres.
Roadways and Aprons:	Concrete and blacktop.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 30



MARKET DATA APPROACH (Continued)

Comparable Sale No. 31

Location:	1933 Davis Street San Leandro, California
Date:	November, 1976
Grantor:	International Harvester Company
Grantee:	Caterpiller Tractor Company
Sale Price:	$5,100,000
Land Area:	32.01 Acres
Building Area:	846,589 Square Feet
Unit Price:	$6.02 per Square Foot of Building Area Including the Land
Comments:	Main structure built in 1951 and contains 742,057 square feet in a two-story concrete and steel frame building with 33,670 square feet of office space on the first floor and 13,000 square feet of semi-finished office space on the second floor. Building has clear height of 16 feet, 40 x 40 foot column spacing and an interior rail dock. Second structure built in 1974 contains 149,532 square feet in a one-story metal building with 3,240 square feet of office space. Building has clear height of 40 to 45 feet and is served by rail.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 31

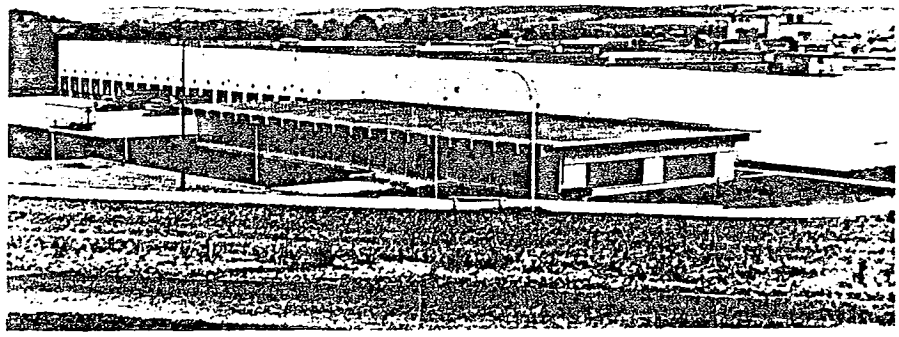
MARKET DATA APPROACH (Continued)

Comparable Sale No. 32

Location:	Baker Street Extension Busti Township, New York
Date:	August 1, 1974
Grantor:	Art Metal Corporation
Grantee:	Cummings Engine Company Columbus, Ohio
Sale Price:	$5,390,000
Land Area:	160± Acres
Building Area:	936,205± Square Feet
Unit Price:	$5.76 per Square Foot of Building Area Including the Land
Comments:	This modern metal working plant was built in 1968 at an original cost of $11,500,000. The sale price six years later represents 47 percent of the original cost. Steel frame; insulated aluminum panel siding; 8" reinforced concrete floor; 32' clear ceiling height; sprinklered; 22 truck docks covered plus 4 interior docks; inside rail facilities. Plant has its own sewerage treatment and industrial water recycling plant, 80 percent of all industrial water reclaimed. 35' excavation for equipment area below ground. 120,000 square feet of aluminum insulated siding gives a light decorative appearance; air-conditioned office area.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 32



MARKET DATA APPROACH (Continued)

Comparable Sale No. 33

Location:	Duss Avenue, Harmony Township Beaver County, Pennsylvania
Date:	April, 1974
Grantor:	A. M. Byers
Grantee:	J. J. Gumberg Company
Sale Price:	$1,755,000
Land Area:	95± Acres
Building Area:	950,000 Square Feet
Year Built:	1930±
Unit Price:	$1.87 per Square Foot of Building Area Including Land
Condition:	Poor to Fair
Comments:	Heavy metal manufacturing facility, utilized by A. M. Byers to manufacture heavy metal pipe. The Gumberg Company sold 35 acres with 467,000 square feet of buildings to the Beaver County Industrial District Authority who, in turn, sold the property to Levinson Steel, Incorporated, unconfirmed sales agreement involving bonds. This site has good level land, all utilities, rail siding and excellent highway access. Building heights are up to 48 feet.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 33

MARKET DATA APPROACH (Continued)

Comparable Sale No. 34

Location:	1700 Williamsburg Pike and Sheridan Avenue Richmond, Virginia
Date:	October 31, 1974
Grantor:	AVCO
Grantee:	D & M Corporation
Sale Price:	$3,750,000
Land Area:	90± Acres (3,920,400± Square Feet)
Building Area:	1,000,000± Square Feet
Unit Price:	$3.75 per Square Foot
Comments:	There was no machinery involved in the sale to D & M Corporation of Connersville, Indiana, other than the two cranes - one 5-ton and one 10-ton. We were advised by AVCO that the last shipment of Federal contracts was July 1, 1974. There was a leasing agreement with various units covering government-owned machinery; and this expired December 31, 1974.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 34 (Continued)

Size:	Approximately 1,000,000 SF as Follows:	
West Building		
Crane Bay	14,400 SF	
Manufacturing Area	348,000 SF	
Mezzanine (Office and Cafeteria)	92,400 SF	
1st Floor Offices	12,000 SF	
Mezzanine Manufacturing	22,800 SF	
	489,600 SF	489,600 SF
East Building		
Crane Bay	4,800 SF	
Manufacturing Area	391,570 SF	
Clean Room (1st Floor)	59,700 SF	
Clean Room (2nd Floor)	13,800 SF	
Balcony Office	20,400 SF	
1st Floor Office	3,600 SF	
	493,870 SF	493,870 SF
Plant Services		
Boiler House	7,104 SF	
Compressor Room	3,840 SF	
Maintenance Shop	5,586 SF	
	16,530 SF	16,530 SF
	Total:	1,000,000 SF
Total Lot Size:	Approximately 99 Acres	
Paved Parking Area:	Office	215
	Visitor	42
	Employees	1,100
	Total	1,357
Condition of Building:	Excellent	

MARKET DATA APPROACH (Continued)

Comparable Sale No. 34 (Continued)

Date of Construction:

West Building Middle Section	1937
West Building North & South Additions	1946

Construction:

West Building

Floors:
Crane bay plus 21,000 SF in southwest corner are 8" concrete reinforced with wire mesh. Balance of building is 5" concrete reinforced with wire mesh.

Walls:
Four inch face brick on common brick backup with steel sash windows along sidewalls.

Roof:
Crane bay is flat roof overall with steel trusses and gypsum deck and BUR. Outer bay (40' each side) has flat roof with wood deck and BUR. Balance of building (center bays of 120') is monitor-type construction with wood deck and BUR.

Office Area:
Floor - VAT over Concrete
Walls - Generally Painted Concrete Block
Ceiling - Acoustical Tile Drop

Offices and Clean Room Area:
Floor - VAT over Concrete
Walls - Generally Painted Concrete Block
Ceiling - Acoustical Tile Drop

Dimensions, Column Spacing and Clear Heights:

West Building

Crane Bay:

Dimensions	60' x 240'	
Column Spacing	20' x 60'	
Clear Heights	Under Beam	31'
	Under Hook	20'

Manufacturing Area:

Dimensions	200' x 1,800'	
Column Spacing	Center Bays	30' x 60'
	Side Bays	20' x 30'
Clear Height	Center Bays	22'
	Under Mezzanine	10'
	Mezzanine	10'

MARKET DATA APPROACH (Continued)

Comparable Sale No. 34 (Continued)

Cranes:

West Building
One 10-ton Bedford Bridge Crane which is cab operated.

Elevators:

West Building
Three 6' x 12' hydraulic freight elevators with a 6,000 lb. capacity each.

Power:

Suppled by Municipal Electric Light & Power Company, Richmond, Indiana

Primary Voltage - 13,800 Volts

Feeders - Two 250 MCM circuits, three phase, three wire from the Williamsburg Substation. One service from each of two 13,800 volt buss duct.

Note: Municipal Electrical Light & Power Company is interconnected with Indiana-Michigan Power Company.

Primary System:

The two Municipal Electric Light & Power Company feeders from the Williamsburg Substation terminated at the 15 KV switchgear supplying AVCO A&B 13,800 volt buss which are connected by an interlocked tie breaker.

The 15 KV switchgear forms a two circuit 13,800 volt radial selective primary distribution system.

Secondary System:

West Building
Southwest Load Center No. 1
1,500 KVA
Two 750 KVA Transformers 13.8 KV/480V
Main Breaker: 2,000 AMP
Southwest Load Center No. 2
2,000 KVA
One 2,000 KVA Transformer 13.8 KV/480V
Main Breaker: 3,000 AMP

MARKET DATA APPROACH (Continued)

Comparable Sale No. 34 (Continued)

Secondary System: (Continued)

West Building
Northwest Load Center No. 1
2,000 KVA
One 2,000 KVA Transformer 13.8 KV/480V
Main Breaker: 3,000 AMP
Northwest Load Center No. 2
2,000 KVA
One 2,000 KVA Transformer 13.8 KV/480V
Main Breaker: 3,000 AMP

Date of Construction:

East Building North Section	1948
East Building South Section	1952

Construction:

East Building
Floors:
Crane bay is 8" concrete reinforced with wire mesh. Balance of building is 5" concrete reinforced with wire mesh.
Walls:
Four inch brick over concrete block with steel sash windows along sidewalls.
Roof:
North section is gypsum deck over steel beams and BUR. South section is monitor-type construction of gypsum deck and BUR over the center bay. The outer bays are flat roof with gypsum deck and BUR.

Dimensions, Column Spacing and Clear Heights:

East Building
Crane Bay:

Dimensions	30' x 160'
Column Spacing	20' x 30'
Clear Heights	Under Beam 22'
	Under Hook 19'

Manufacturing Area:
North Section

Dimensions	200' x 980'
Column Spacing	20' x 40'
Clear Height	23'

South Section

Dimensions	200' x 790'
Column Spacing	Center Bays 30' x 60'
	Side Bays 20' x 30'
Clear Height	22'

MARKET DATA APPROACH (Continued)

Comparable Sale No. 34 (Continued)

Cranes:

East Building
One 5-ton American Monorail Crane which is either cab or pendant operated. This interlocks with monorail span and goes out to dock.
Ten 1- and 2-ton cranes in north area of building.

Elevators:

East Building
One 6' x 12' hydraulic freight elevator with a 5,000 lb. capacity.

Power:

Supplied by Municipal Electric Light & Power Company, Richmond, Indiana

Primary Voltage - 13,800 Volts

Feeders - Two 250 MCM circuits, three phase, three wire from the Williamsburg Substation. One service from each of two 13,800 volt buss duct.

Note: Municipal Electric Light & Power Company is interconnected with Indiana-Michigan Power Company.

Primary System:

The two Municipal Electric Light & Power Company feeders from the Williamsburg Substation terminated at the 15 KV switchgear supplying AVCO A&B 13,800 volt buss which are connected by an interlocked tie breaker.

The 15 KV Switchgear forms a two circuit 13,800 volt radial selective primary distribution system.

Secondary System:

East Building
Northeast Load Center No. 1
1,500 KVA
Two 750 KVA Transformers 13.8 KV/480V
Main Breaker: 2,000 AMP
Northeast Load Center No. 2
2,000 KVA
One 2,000 KVA Transformer 13.8 KV/480V
Main Breaker: 3,000 AMP

MARKET DATA APPROACH (Continued)

Comparable Sale No. 34 (Continued)

Secondary System: (Continued)

East Building
Northwest Load Center No. 3
1,500 KVA
Two 750 KVA Transformers 13.8 KV/480V
Main Breaker: 3,000 AMP

Power House:

P Load Center
1,500 KVA
Two 750 KVA Transformers 13.8 KV/480V
Main Breaker: 2,000 AMP

Secondary Distribution:

Manufacturing Area via two 600 AMP buss ducts in center bays which run the length of the building. In addition, there are shorter runs (150-600 AMP) in various locations in each building. All portions of electrical systems are fully grounded.

Lighting:

Manufacturing Areas
Crane bays have incandescent lighting providing approximately 50' candles. Basic manufacturing area has fluorescent which supplements outside light from monitor roof. North section of east building has incandescent lighting of approximately 30' candles.

Office Area
Has strip-type recessed fluorescent lights of approximately 80' candles.

Clean Rooms
Approximately half of clean room area is lit by strip-type fluorescent units providing approximately 100' candles. The balance of the space is lighted with strip-type recessed fluorescent lights of approximately 80' candles.

Water:

Supplied by Richmond Waterworks Corporation
Street Main: 8"
Static Pressure: 43 PSI
Residual Pressure: 26 PSI at 1,280 GPM

Process
Main headers run length of both buildings with water generally available at any location throughout the building.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 34 (Continued)

Air System: (Continued)

Compressor No. 3
Manufacturer: Ingersoll-Rand
Type: XRE
Discharge Pressure: 100 PSI
Capacity: 1,270 CFM
HP: 250

Compressor No. 4
Manufacturer: Ingersoll-Rand
Type: XLE
Discharge Pressure: 100 PSI
Capacity: 1,600 CFM
HP: 300

Compressor No. 5
Manufacturer: Ingersoll-Rand
Type: XLE
Discharge Pressure: 100 PSI
Capacity: 1,600 CFM
HP: 300

Compressor No. 6
Manufacturer: Ingersoll-Rand
Type: XLE
Discharge Pressure: 100 PSI
Capacity: 1,300 CFM
HP: 250

Each compressor has an after cooler and its own receiver. The after cooler utilizes city water discharging public sewer system.

Gas:

Allotment of 3,300,000 cubic feet/month. Current restrictions limit use to 51 percent of allotment. Indications are that allotment is transferable.

Gas distributed throughout both buildings with main headers running the length of the building. Although they did not have standby propane, other plants in the area did and it is available.

Sewage:

Sanitary

Served by Richmond Sanitary District with a 15" line. City is currently processing a limited amount of industrial waste without prior treatment. Each building is served by an independent line.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 34 (Continued)

Fire Protection System:

Supply

Sprinkler protection is provided by 100,000-gallon elevated storage tank and a 350,000-gallon underground suction tank. Water to the sprinklers is provided by steam electric motor or diesel-driven booster pumps.

Loop Main

Full loop around each building. There is 8" around West Building and 10" around East Building.

Sprinkler Density

The plant has 100 percent coverage. The density is one head per 100 square feet. The loading docks and rear of East Building has a dry system. The balance is covered by a wet system.

Note: System is designed and has approval of Factory Mutual who state that the public water supply is adequate for fire protection without the elevated or underground tanks provided "the building is broom clean".

East Building

North end of this building has three firewalls (about 320' apart) and automatic fire doors.

Air System:

Compressed air is distributed through both buildings with the main header running the length of each building. System is supplied by:

Compressor No. 1
Manufacturer: Ingersoll-Rand
Type: XRE
Discharge Pressure: 100 PSI
Capacity: 600 CFM
HP: 125

Compressor No. 2
Manufacturer: Ingersoll-Rand
Type: XRE
Discharge Pressure: 100 PSI
Capacity: 600 CFM
HP: 125

MARKET DATA APPROACH (Continued)

Comparable Sale No. 34 (Continued)

Heat: (Continued)

Coal Storage & Handling Equipment

There is a railroad spur by the boiler house. It is a yard dump feeding system to a 500-ton silo. Coal can be dumped in yard or into a hopper under rail which feeds, via conveyor, the silo.

Pollution Control

Each boiler is provided with a Pratt Daniel Fly Ash Collector. The ash is collected in a pile at rear of the property.

Heating, Ventilating, Air Conditioning:

Manufacturing Area

Heating: Steam unit heaters throughout both buildings and supplied by boilers as outlined above. Ventilation: Provided by movable sashes in monitor roof.

Office

All office areas have HVAC provided by combination of windows and package units. These vary in size from 1-1/2 tons to 25 tons.

Clean Rooms

Environmental control provided by central system which provides cooling, heating, humidity, and dust control.

Cooling

Provided by four Carrier units which provide 250 tons of cooling, and one York 100-ton air conditioner.

Heating

By duct-mounted coils supplied with steam from the boiler.

Dust Control

Has two systems as follows:

1. Duct-Mounted Filters
2. Oil Bath Filters

MARKET DATA APPROACH (Continued)

Comparable Sale No. 34 (Continued)

Sewage: (Continued)

Storm Sewer

Internal privately owned system terminating in a creek adjoining the property. There are several 36" storm sewers, and there are also interior roof drains which flow into the storm sewers.

Heat:

Entire complex is heated by steam provided by a central boiler house. There are individual unit heaters throughout the buildings.

Boiler House

169,000 lbs. of steam/hour at 125 PSI provided by the following:

Boiler No. 1
Manufacturer: Babcock-Wilcox Company
Type: Sterling Four Drum
Capacity: 33,800 lbs.
Steam Pressure: 125 PSI
Fuel: Coal

Boiler No. 2
Manufacturer: Babcock-Wilcox Company
Type: Sterling Four Drum
Capacity: 33,800 lbs.
Steam Pressure: 125 PSI
Fuel: Coal

Boiler No. 3
Manufacturer: Babcock-Wilcox Company
Type: Sterling Four Drum
Capacity: 33,800 lbs.
Steam Pressure: 125 PSI
Fuel: Coal

Boiler No. 4
Manufacturer: Babcock-Wilcox Company
Type: Sterling Four Drum
Capacity: 67,600 lbs.
Steam Pressure: 125 PSI
Fuel: Coal

In 1973, AVCO used 11,870 tons of coal.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 34 (Continued)

Toilet Facilities: Numerous facilities throughout the building. Capable of handling 4,500 people.

Eating Facilities:

Kitchens

Plant has a fully equipped kitchen located on the mezzanine of the West Building. The kitchen has walk-in freezers, ranges, ovens, grills, etc. Presently, it is not clear if they will leave all the kitchen equipment.

Eating Areas

There are three separate eating areas; one for production employees, one for salaried personnel, and one for management personnel.

Shipping and Receiving:

Truck Facilities

Drive-in Doors: There are two drive-in doors in the crane bay of the West Building.

Truck Docks: There are 20' deep truck docks at the north end of each building. They run the full width of the buildings and have a 17-truck capacity. There are three doors from dock to the inside of the buildings.

West Building

Has a 10' wide covered dock running the entire length of the west side of the building which can handle trucks on rail. The east side of this building has a 10' wide covered platform for trucks only.

East Building

Has a 10' wide covered dock running the entire length of the east side of the building. There is also a dock running about 700' on the west side of the building.

Railroad Facilities: Service by C & O and Penn Central.

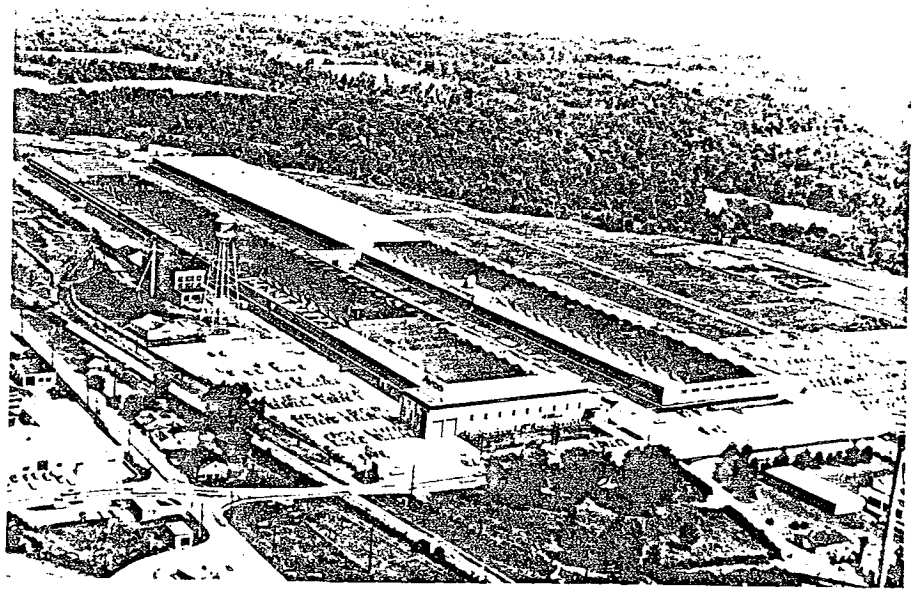
MARKET DATA APPROACH (Continued)

Comparable Sale No. 34 (Continued)

Railroad Facilities: (Continued)	West Building Has two tracks running the length of the building on the west side. They have a 50-car capacity. There is also interior rail in the crane bay. East Building Tracks run one-half the length of the building and can handle 14 cars per track. There is also a side spur which can provide storage near the building. Boiler House There is rail spur which serves the boiler house for delivery of coal.
Security:	Approximately 62 acres of the complex are protected by security fencing and guard control access.
Zoning:	Heavy Industrial
Assessment:	$1,319,790
Taxes:	$98,682
Miscellaneous:	A complete set of plans are available. There is an undergound tunnel at rear of the building and a covered walkway which connects the buildings. These can be used for forklift trucks to move between buildings.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 34



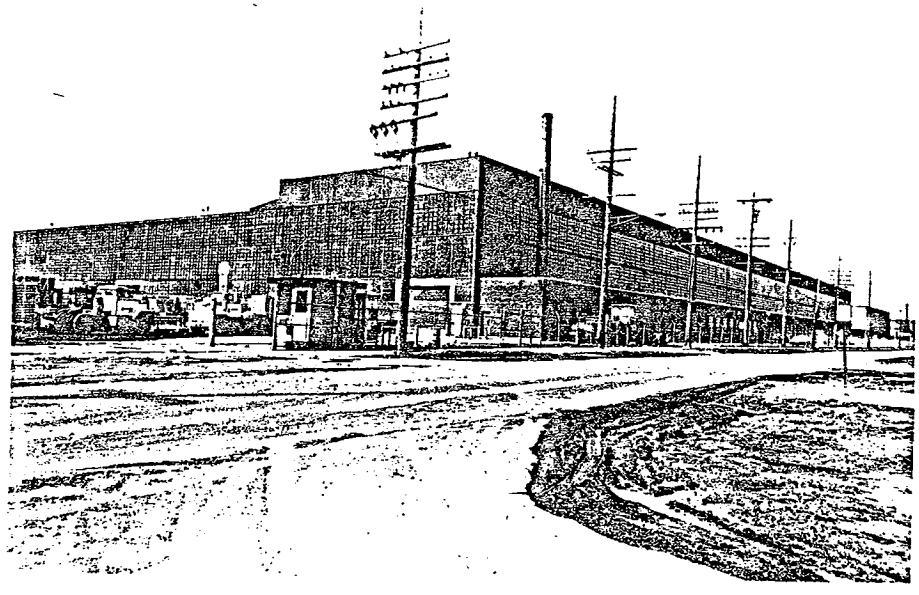
MARKET DATA APPROACH (Continued)

Comparable Sale No. 35
(Option)

Location:	6565 East 8-Mile Road, Corner of Sherwood Avenue Warren, Michigan
Date:	Written Option to Buy Expires January 1, 1975
Grantor:	R. C. Mahon Corporation
Grantee:	Chrysler Corporation Chrysler Corporation did not exercise the option.
Sale Price: (Option)	$7,750,000
Land Area:	71.38± Acres
Building Area:	1,120,000 Square Feet
Unit Price:	$6.91 per Square Foot of Building Area Including Land
Comments:	Heavy Metal Manufacturing, Storage and Distribution (Multi-Purpose Building); Built in 1949; Heavy Steel Beams, Columns, and Frame; Exterior Walls--Steel Casement Windows over Brick and Block Base, 8' High; 110,000± Square Feet Three-Story, Modern, Brick, Air-Conditioned Office Building; Excellent Heavy Power Supply and Distribution System; Rail Spur to Interior Loading Area; 10- to 20-Ton Cranes; Good Proximity to Truck and Auto Main Arteries, Parking for More Than 1,000 Autos and Trucks; See Comparable Rental No. 28

MARKET DATA APPROACH (Continued)

Comparable Sale No. 35



MARKET DATA APPROACH (Continued)

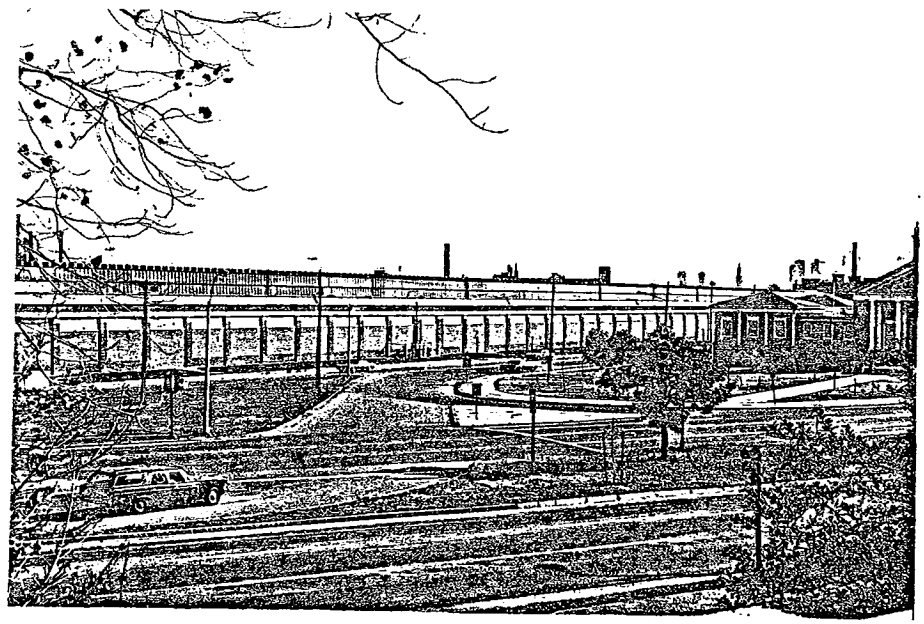
Comparable Sale No. 36

(Offering)

Location:	Middlesex and Mystic Avenues The Boston and Maine Railroad and the Mystic River Somerville, Massachusetts
Date:	Current On Market Six to Nine Months
Grantor:	First National Stores
Asking Price:	$6,000,000
Land Area:	52 Acres
Building Area:	1,200,000 Square Feet
Unit Price:	$5.00 per Square Foot of Building Area
Comments:	Property consists of the former 600,000 square foot Ford Assembly Plant, a four-story office building and a three- and four-story warehouse building. A sale had been negotiated at the above asking price whereby the property was to be converted into a shopping mall. However, negotiations were terminated.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 36



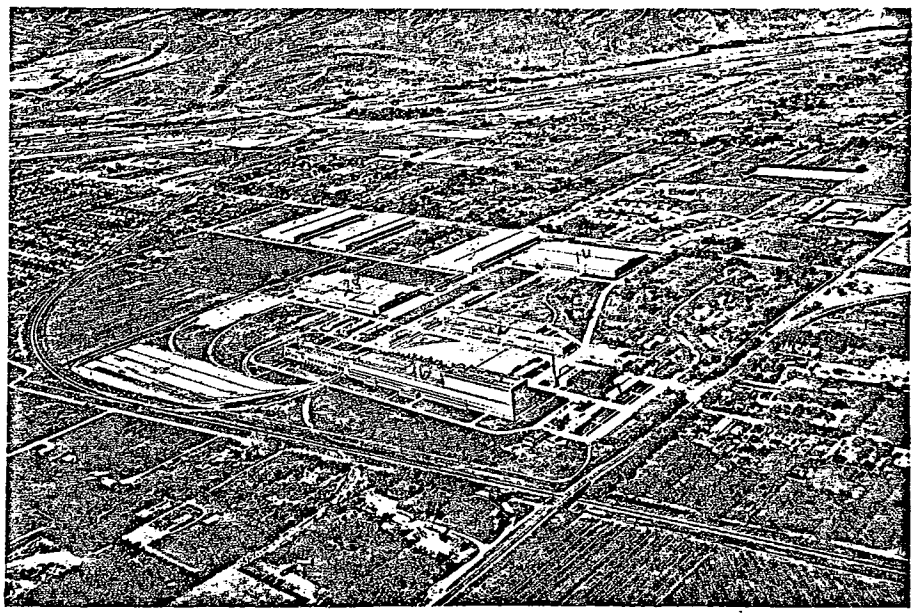
MARKET DATA APPROACH (Continued)

Comparable Sale No. 37

Location:	Pocatello, Idaho
Date:	April 1, 1974
Grantor:	Nielson Enterprises/Allied Equities Corporation
Grantee:	Bucyrus - Erie
Sale Price:	$7,750,000
Land Area:	168.0 Acres
Building Area:	1,400,000 Square Feet
Year Built:	1942
Unit Price:	$5.54 per Square Foot
Condition:	Excellent
Comments:	This facility was built as a naval ordnance facility for construction and refurbishing of naval guns and other ordnance products. At time of sale, it comprised seven buildings of 200,000 square feet each with high ceilings and cranes of from 15 to 250 tons. The plant has been sold twice, once for the purpose of subdivision into smaller areas, and the second and final sale as a single unit to be owner occupied.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 37



MARKET DATA APPROACH (Continued)

Comparable Sale No. 38

Location:	Lake County, Ohio (New Painesville)
Date:	December 29, 1969
Grantor:	Midland-Ross Corporation
Grantee:	American Cyanamid Company
Sale Price:	$4,000,000
Land Area:	630± Acres
Building Area:	1,431,975± Square Feet
Unit Price:	$2.79 per Square Foot

Comments: On December 29, 1969, Midland-Ross Corporation sold to American Cyanamid Company its IRC Fibers Division plant near Painesville in Lake County, Ohio. The Grantee took title in the name of its wholly owned subsidiary, IRC Fibers Company. The sale included real property, all machinery and equipment in the plant, inventory, accounts receivable, and such intangibles as patents, trademarks, and technical know-how.

Although the total purchase price was about $24,000,000, the parties, by arm's length negotiation, allocated $4,000,000 as the purchase price of the real property including buildings and land improvements. The affidavit filed with the Lake County Recorder for determination of the real estate transfer tax stated the purchase price at $4,000,000.

The plant is located on 630 acres of lakefront land of which about 500 acres were vacant and unimproved.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 38 (Continued)

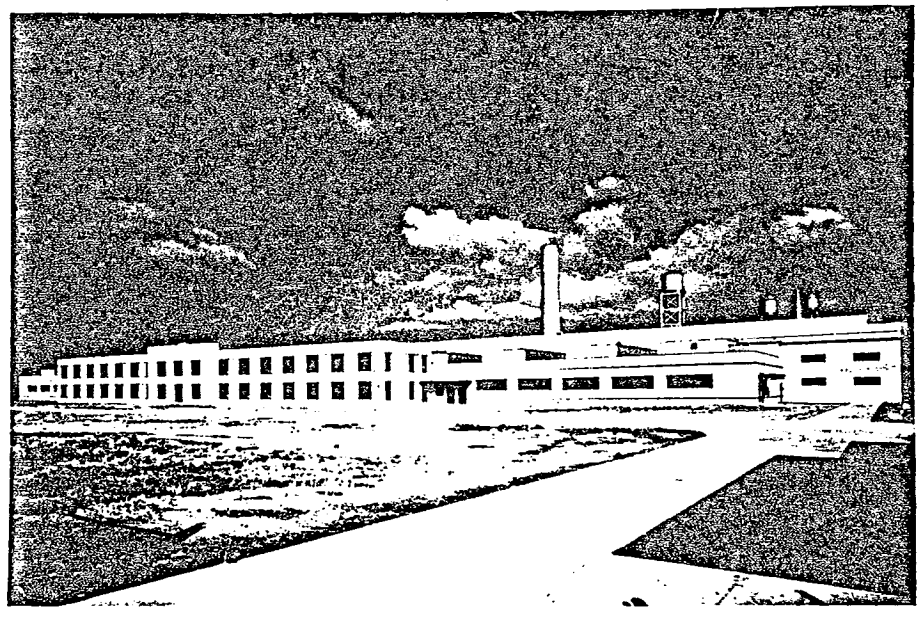
Comments: (Continued)

The plant had total floor area of 1,431,975+ square feet and consisted of about 30 buildings constructed between 1935 and 1969. Eighty-two percent of the floor area was 27 to 34 years old, 10 percent was 18 to 22 years old, and the remaining eight percent was one to nine years old. Functional obsolescence was very substantial.

The plant was built solely for the production of rayon filament yarn primarily for the tire and textile markets. Thirty percent of the floor area was usable only for that purpose. By 1969, the market for rayon yarn had been largely displaced by polyester and nylon yarn. Prior to the sale, there had been some conversion of the facilities to the production of polyester yarn, which was the use for which the purchaser intended the plant. Since the purchase, polyester yarn capacity has been doubled by further conversion. As it stood, however, at the time of the sale, economic obsolescence was a major factor in depression of the plant's market value.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 38



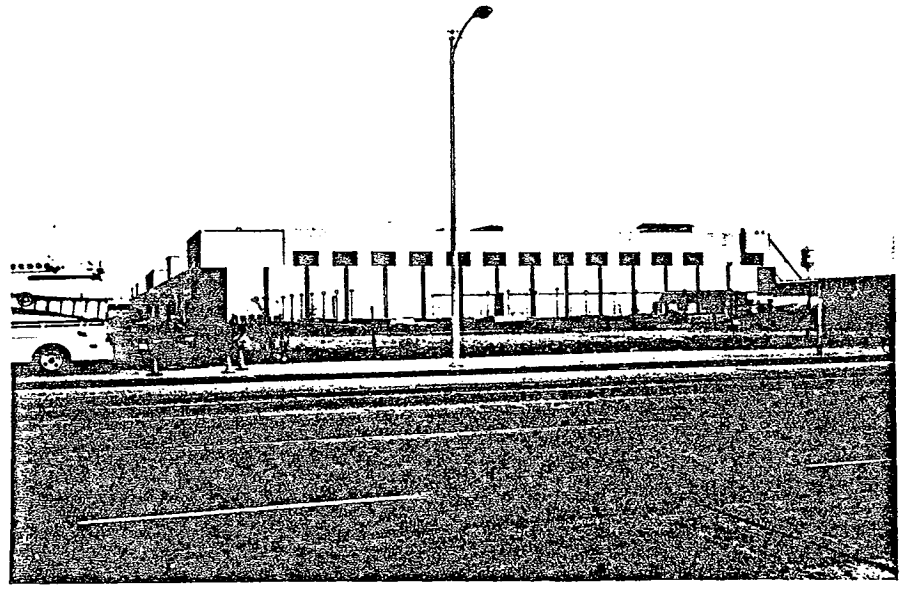
MARKET DATA APPROACH (Continued)

Comparable Sale No. 39

Location:	5800 South Eastern Avenue Commerce, California
Date:	May 1, 1972
Grantor:	Chrysler Corporation
Grantee:	Trammell Crow Company
Sale Price:	$7,500,000
Land Area:	86.500± Acres
Building Area:	1,560,000± Square Feet
Unit Price:	$4.81 per Square Foot of Building Area Including the Land
Year Built:	1964
Comments:	Steel Frame and Trusses; Block Curtain Walls; Steel Casement Windows over Block and Brick Base; Fully Sprinklered; Heavy Power Supply and Distribution Systems; High Intensity Lighting; Rail Loading and Unloading Docks; Excellent Truck Facilities; 21,000 Square Feet Modern Air-Conditioned Office Area; All Utilities on Site; Excellent Proximity to Truck and Auto Main Arteries

MARKET DATA APPROACH (Continued)

Comparable Sale No. 39



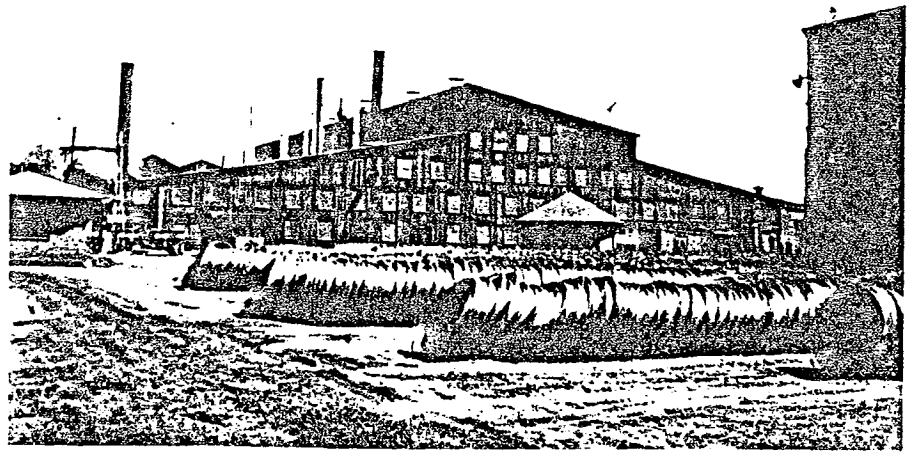
MARKET DATA APPROACH (Continued)

Comparable Sale No. 40

Location:	East Side Second Avenue Florence Township, New Jersey
Date:	October 25, 1974
Grantor:	C. F. & I. Steel Corporation
Grantee:	Roebling Steel and Wire Corporation
Sale Price:	$2,500,000
Land Area:	247.08 Acres
Building Area:	1,575,976 Square Feet
Unit Price:	$1.58 per Square Foot of Building Area Including the Land
Comments:	Sale was of a 90+ building complex of heavy industrial buildings.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 40



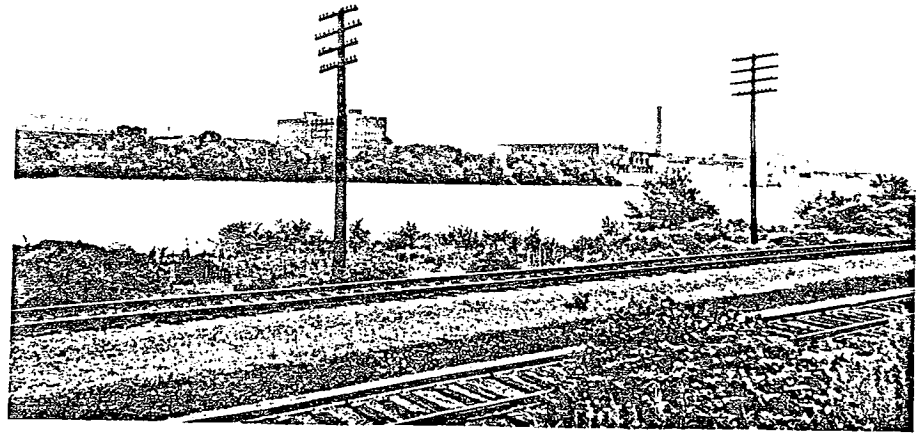
MARKET DATA APPROACH (Continued)

Comparable Sale No. 41

Location:	First Avenue, New Kensington and Arnold Westmoreland County, Pennsylvania
Date:	December 12, 1971
Grantor:	Alcoa
Grantee:	Schreiber Industrial District
Sale Price:	$3,000,000
Land Area:	63± Acres
Building Area:	2,041,624 Square Feet, 27 Buildings
Unit Price:	$1.47 per Square Foot of Building Area Including Land
Condition:	Fair to Good
Comments:	Typical heavy industrial, metal producing mill-type complex containing good office and research space. Built from 1908 to 1965. Buildings have heavy reinforced concrete foundations and floors, some with wood block coverings; very heavy crane supporting steel frames in the larger buildings, metal siding; roof decking composition overlay and extensive Allegheny River frontage with bulkhead and docking facilities. All public utilities; site is serviced by Penn Central Railroad. Clear ceiling heights up to 50' in crane serviced buildings. See Comparable Rental No. 29.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 41



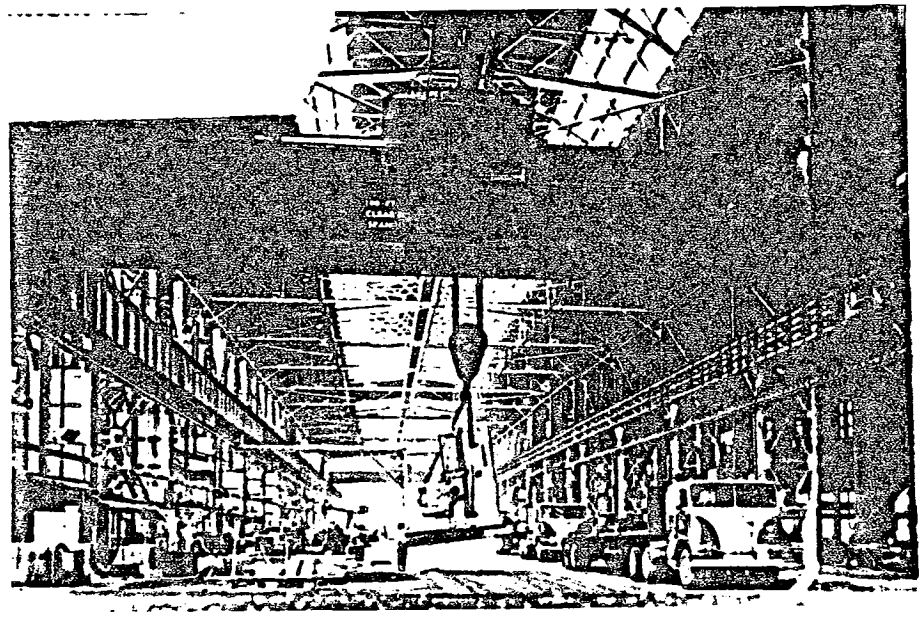
MARKET DATA APPROACH (Continued)

Comparable Sale No. 42

Location:	South Charleston, West Virginia
Date:	August, 1972
Grantor:	F. M. C. Corporation (Formerly Housed Alcoa Aluminum Plant)
Grantee:	Raymond P. Park
Sale Price:	$4,500,000
Land Area:	75.0 Acres
Building Area:	Ground Floor - 1,739,302 Square Feet Upper Floor - 332,046 Square Feet Total - 2,071,348 Square Feet
Year Built:	Between 1918 and 1944
Unit Price:	$2.17 per Square Foot of Building Area Including the Land
Condition:	Excellent
Comments:	Three main buildings of 1,946,728 square feet and three accessory buildings. This is a heavy duty brick and steel plant built by the U. S. Navy. Originally known as the Armour Plating Works, it has very high ceilings (mostly 32' clear) and large bays (100' spans) with 23 cranes of 100 to 200 ton capacity, rail and truck docks and access to barged transport.

MARKET DATA APPROACH (Continued)

Comparable Sale No. 42



MARKET DATA APPROACH (Continued)

Comparable Sale No. 43

Location:	West Side of Riverside Drive at the Ohio Route 237 Interchange, Village of Brooklyn, Ohio
Date:	June, 1977
Grantor:	U.S. Government
Grantee:	Raymond Park
Sale Price:	$8,012,000
Land Area:	175.57± Acres
Building Area:	2,557,101 Square Feet
Unit Price:	$3.13 per Square Foot of Building Area (Total) $4.10 per Square Foot of Building Area Excluding 603,000 Square Feet of Basement Area
Comments:	This is one of the largest, heavy industrial facilities to be sold in the last three years. The complex is a well-constructed and maintained facility. Mr. Park indicated during a recent phone conversation that he is currently preparing the facility for subdivision and rental to heavy and light industrial users. The complex has 2,280,201 square feet of manufacturing area, 166,200 square feet of office and administration area, two separate large steel hangar-type buildings totaling 79,452 square feet and mezzanine areas of 31,248 square feet. Clear ceiling heights up to 45 feet; ten bridge cranes with 100 foot spans and two with 300 foot spans.

MARKET DATA APPROACH (Continued)

The subject contains a total of 1,662,845 square feet of building area, excluding basement space, located in 44 major building structures, many of which are interconnected. The structure, whose ages span a period of approximately 24 years, varies in construction ranging from concrete block to protected and unprotected metal on steel frames. The buildings, which are utilized in the reduction of aluminum, show the effects of both heavy industrial usage and exposure to the elements. Thus, they are in various stages of condition ranging from very good to poor. Further, the subject has an extremely limited gross office area which accounts for less than one-half percent of the total building area. Not unexpectedly, a comparable having the appropriate breakdown could not be found.

The appraisers have searched the entire Montana real estate market for sales of large heavy industrial complexes and have observed that no sales transpired in recent years where the building area exceeded 144,000 square feet. With this sale being approximately 8.7 percent as large as the subject and with all of the other intrastate industrial sales being substantially smaller in size, it became mandatory to search for sales of other large heavy industrial complexes throughout the country.

Each of the sales has been analyzed with regard to the subject from a functional standpoint and with regard to the availability of rail transportation. Geographical considerations were analyzed from the standpoint of raw material availability, markets and labor force.

These considerations were essential for should the subject be placed on the market for sale the ultimate purchaser would most likely not be from the State of Montana.

MARKET DATA APPROACH (Continued)

Based upon the foregoing, it is the opinion of the appraisers that the unit value of the subject property as of January 1, 1978, is $6.00 per square foot of non-basement building area. Therefore:

1,662,845 SF @ $6.00/SF =	$9,977,070
Rounded To	$9,977,000

Value Indication via Market Data Approach

$9,977,000

RECONCILIATION AND VALUE CONCLUSIONS

The three approaches to value have produced the following conclusions:

Cost Approach	$10,851,000
Income Approach	$10,393,000
Market Data Approach	$ 9,977,000

The Cost Approach, which normally sets the upper limit of value, was developed after determining local construction costs from discussions with the plant engineer of the subject property, by reference to national valuation manuals, and from the appraisers' first-hand experience in the building trades. The unit costs applied were derived to include the current costs for labor, materials, profit, and overhead. Depreciation allowances were taken for physical deterioration and functional and economic obsolescence.

The appraisers have included on the following page an analysis of the depreciation taken in the Cost Approach by capitalizing the rent loss and comparing it to the depreciation taken. This analysis is based on the known replacement cost, which if the buildings were new as of the date of value, would require a net income equivalent to the overall rate. The amount by which the net income requirement exceeds the known economic net income, when capitalized, represents the loss in value since there is insufficient net income to support this value.

RECONCILIATION AND VALUE CONCLUSIONS (Continued)

Depreciation Substantiation

Replacement Cost - Buildings		$37,540,397
Replacement Cost - Site Improvements		1,474,057
Total Replacement Cost		$39,014,454
Land Value (289 Acres)		347,000
Total Investment		$39,361,454
Overall Rate	12.00%	
Net Income Requirement $39,361,454 x .1200	$4,723,374	
Less Economic Net Income	1,247,134	
Rent Loss		$ 3,476,240
Capitalized Value of Rent Loss $3,476,240 ÷ .1200		$28,968,666

Comparison with Cost Approach

Total Replacement Cost	$39,014,454	
Less Depreciated Value of Improvements	10,504,382	
Total Depreciation from All Sources		$28,510,072

Conclusion:

The depreciation taken in the Cost Approach is substantiated, since the capitalized rent loss exceeds the depreciation by $458,594.

RECONCILIATION AND VALUE CONCLUSIONS (Continued)

In the Income Approach an economic rental was utilized in order to derive the hypothetical income estimate for the property. The conjectural rental is calculated at the current market. The majority of comparable industrial facilities are being leased on a net basis and that is the approach utilized in the report. The capitalization rate selected is indicative of the returns sought by investors in the market. However, facilities the age and size of the subject are sold rather than leased and consequently less reliance was placed on the Income Approach.

The Market Data Approach relies heavily on the principle of substitution which affirms that no prudent person will pay more for a property than it will cost to buy a comparable substitute property. The price that a typical purchaser pays is usually the result of an extensive shopping process in which he is constantly comparing available alternatives. In the report the Market Data Approach has been well documented and is of primary significance since facilities such as the subject are sold on the open market. This approach is most relevant since the purpose of the assignment was to determine market value, i.e., the highest price that the property will bring in an open and competitive market.

Therefore, the appraisers have concluded that the fair market value of the subject property, as of January 1, 1978, is:

TEN MILLION DOLLARS
($10,000,000)

Allocated as follows:

Land	$ 347,000
Improvements	9,653,000
Total	$10,000,000

A D D E N D A

UNITED STATES ALUMINUM INDUSTRY

Introduction

The aluminum industry in the United States traces its origins to 1888 and the formation of the Pittsburgh Reduction Company, now known as the Aluminum Company of America, or Alcoa. Prior to World War II, Alcoa enjoyed a monopoly position in the market; however, during wartime the government invested over $700 million in aluminum and allied facilities which were sold to Alcoa, Reynolds and Kaiser after the war, transforming the monopoly into an oligopoly. The industry is highly concentrated, with these three firms currently accounting for 65 percent of total domestic primary aluminum production and another nine firms combining to produce the remainder. In addition, hundreds of independent fabricators purchase ingot from the primary producers.

The aluminum industry is a high fixed cost and cyclical industry. Although shipments have not yet regained their 1973 peak levels, the industry has essentially recovered from the recession. Looking to the future, it is expected that supply will become increasingly tight relative to demand, as little expansion is currently planned. Thus, prices should remain firm and profit margins should improve. In short, we anticipate a favorable outlook for the aluminum industry through the early 1980's.

Prepared for: International Appraisal Company, Inc.

By: Mary M. McGoldrick
Economics Officer
Industrial National Bank of Rhode Island

Date: March 31, 1978

Shipments

Aluminum industry shipments of ingot and mill products totaled 13,346 million pounds in 1977, up 4.7 percent from the 12,747 million pounds shipped in 1976, but still 9.1 percent below 1973's record shipments of 14,686 million pounds. The following table exhibits details of the current and historical end use breakdown by market:

Market	1966	1973	1977E
Building and Construction	22.0%	24.7%	22.9%
Transportation	21.6	19.2	19.9
Consumer Durables	10.1	9.1	8.1
Electrical	14.4	12.6	10.4
Machinery and Equipment	7.2	6.5	7.2
Containers and Packaging	8.2	14.0	20.8
Exports	6.5	6.4	5.5
Other	10.0	7.5	5.2

For 1978, a 4 to 5 percent increase in demand is forecasted as the economy continues on its recovery track, albeit at a slower pace. Details of this outlook by major market follow.

Although total housing starts are projected to decline from 1977's near record level, continued efforts of homeowners to insulate their homes better and thus conserve energy should provide an important offset. The proposed energy legislation (which appears to be nearing passage) contains provisions for a tax credit of up to $400 for insulation, which should stimulate sales of aluminum siding, storm windows, and doors. Thus, the building and construction market should have a modest contribution to increased shipments in 1978.

Containers and packaging represent not only the industry's second largest market but the fastest growing market as well, having risen from 8 percent

of industry shipments in 1966 to over 20 percent of shipments currently. Behind this growth has been a growing consumer preference for aluminum beverage cans, as evidenced by their share of the soft drink and beer can market, which rose from 23 percent in 1972 to 50 percent in 1977. Vigorous and successful recycling efforts sponsored by the major producers have eased environmentalists' concerns over the growing use of aluminum cans. Although increased price competition between tinplate and aluminum can stock is likely, technological advances have reduced the average weight of an aluminum can by as much as 30 percent since their introduction, which should serve to offset a negative price differential. Since 1970, aluminum shipments for containers have been growing at a 10.3 percent annual rate; we forecast that, although growth will slow with increased market penetration, demand for aluminum containers and packaging should continue to rise faster than total demand.

Despite our forecast of a 5 percent decline in unit auto sales in 1978, aluminum shipments to the transportation market should continue to increase. Government-mandated fuel efficiency standards have forced the automobile industry to produce lighter weight cars. Auto makers have responded by both shrinking the size and changing to lighter materials. Consequently, the average 1978 model car contains 114 pounds of aluminum, up 14 percent from the 1977 models. In addition, aluminum industry executives estimate that, by 1980, the average new car will contain 150 to 200 pounds of aluminum and that, by 1985, usage will increase to 225 to 425 pounds per auto. Assuming no dramatic change in the price of aluminum relative to competing material, shipments to the transportation market should rise approximately 4 to 5 percent in 1978.

The electrical market represented more than 10 percent of industry shipments in 1977. This market has been slow to recover from the 1973-75 reces-

sion; shipments in 1977 were still 25 percent below peak 1973 levels. However, as utility expansion programs once again begin to move forward, shipments to this market will begin to rebound. For 1978, electrical demand should rise faster than total demand.

Shipments to the consumer durables market rose 37 percent in 1976 and an estimated 6 percent plus in 1977 as an expanding economy and a high level of housing starts bolstered demand. Given our forecast of a slower growth in real gross national product and real consumption of furniture and appliances in 1978, the growth in shipments to the consumer durables market should moderate somewhat.

The machinery and equipment market accounted for a little more than 7 percent of aluminum industry shipments in 1977. For 1978, we anticipate a 6 to 8 percent increase in shipments, as moderate increases in capital spending are projected to carry over into 1978.

The remaining 10 percent of aluminum shipments in 1977 consisted of two general categories--exports and other. Shipments to these markets are expected to be flat to slightly lower next year.

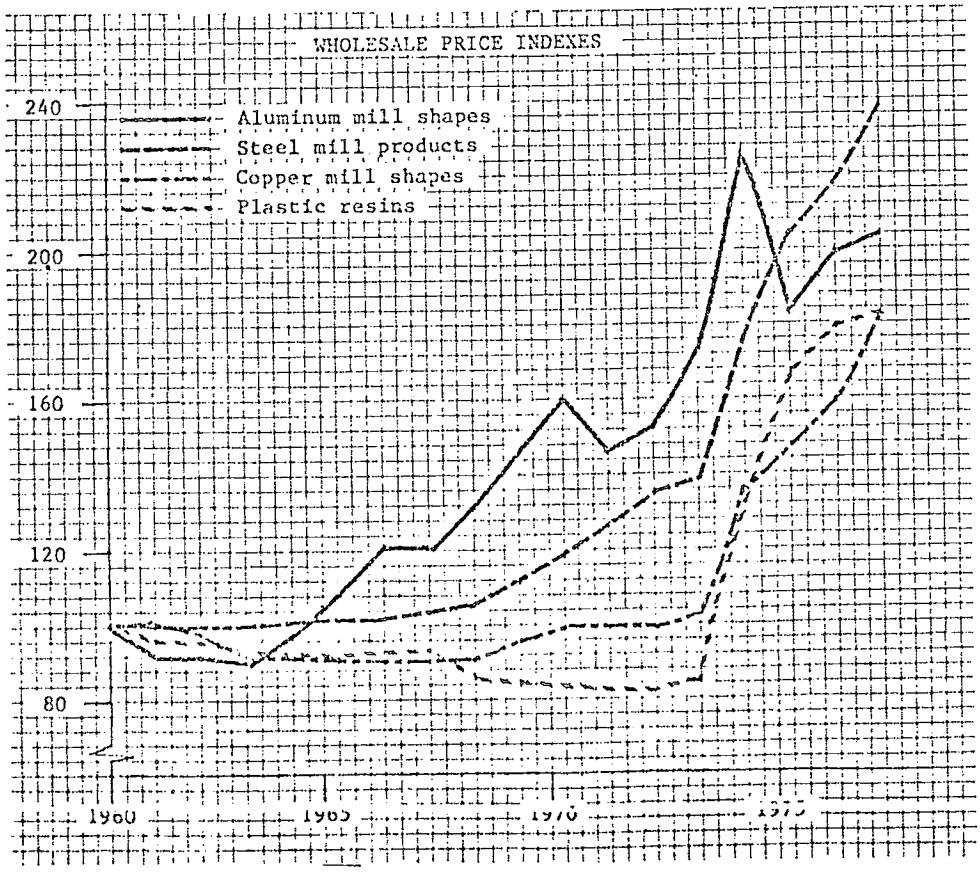
In summary, we expect domestic shipments of aluminum to post a 4 to 5 percent gain in 1978. However, since aluminum consumption is closely related to the overall level of economic activity, any significant deviation from our estimated 4.0 percent growth rate of real gross national product could substantially alter our shipment forecast. Looking at the next five years, the Department of Commerce is forecasting that shipments will grow at an average annual rate of approximately 5 percent, reaching over 18 billion pounds in 1982.

This increase is expected for the following reasons:

1. The increasing awareness of the need for and emphasis on energy savings should add impetus to future growth, particularly in the automotive and building markets. This thrust is expected to offset the effects of any moderate economic slowdown which may develop over the five-year horizon.

2. Existing growth markets such as containers and building products have not been saturated. In addition, the development of new applications (for example, in the solar energy field) for which aluminum is uniquely suited and has a distinct advantage will expand the growth potential of this metal.

3. The rate of aluminum's price hikes has been comparable to that of competing materials.



DOMESTIC ALUMINUM SUPPLY AND DEMAND DATA

	1970	1971	1972	1973	1974	1975	1976	1977	1978E A	1978E B
SUPPLY										
Primary Production	7,952	7,850	8,245	9,058	9,807	7,758	8,503	9,077	9,800	9,900
Imports-Ingot	700	1,109	1,319	1,016	1,018	868	1,151	1,341	1,200	1,100
Mill Product	197	176	192	140	112	131	190	166	150	100
Total Imports	897	1,285	1,511	1,156	1,130	999	1,341	1,507	1,350	1,200
Secondary Recovery	2,067	2,214	2,251	2,470	2,564	2,478	2,892	3,083E	3,000	3,400
U. S. Stockpile	49	--	12	1,461	1,021	5	18	--	--	--
Subtotal	10,965	11,349	12,019	14,145	14,522	11,240	12,754	13,667	14,150	14,500
Less: Exports-Ingot	820	228	221	465	423	378	312	203		
Mill Product	341	342	341	474	521	440	530	523	650	600
Melt Loss*	174	179	192	231	237	173	193	208	220	220
Available for Domestic Consumption	9,630	10,600	11,265	12,975	13,341	10,249	11,119	12,733	13,280	13,680
Growth in Supply (%)	-1.6	10.1	6.3	15.2	2.8	-23.2	8.5	14.5	4.3	7.4
DEMAND										
Total Domestic Shipments	8,951	9,858	11,487	13,747	12,788	9,111	11,905	12,620	13,100	13,570
Growth in Shipments (%)	-8.8	10.1	16.5	19.7	-7.0	-28.8	30.7	6.0	3.8	7.5
Producers' Inventories	4,387	5,026	4,861	4,366	5,156	5,999	5,631	5,707	5,350	5,130
Change from Prior Year	602	639	-165	-495	790	843	-368	76	-357	577
Inventory/Shipment Ratio	.49	.51	.42	.32	.40	.66	.47	.45	.41	.38
Ingot Capacity	8,430	9,332	9,542	9,786	9,832	10,043	10,386	10,386	10,386	10,386
Operating Rate (%)	94.3	84.1	86.4	92.6	99.7	77.2	81.9	87.4	94.4	95.3
FRB Index of Industrial Production	107.8	109.6	119.7	129.8	129.3	117.8	129.8	137.1	142.6	144.0
% Change	-3.0	1.7	9.2	8.4	-0.4	8.9	10.2	5.6	4.0	5.0

E - Estimated
A - Assumes real gross national product growth of 2.5%
B - Assumes real gross national product growth of 4.5%
*Melt loss is estimated at 2% of ingot supply (primary production, ingot imports, stockpile releases)

Capacity

Total installed domestic capacity at the end of 1977 was estimated to be 5,193,400 short tons, essentially unchanged from 1976. No new capacity is anticipated during 1978. During 1979, 85,000 short tons of new capacity is projected to come on line. The major component of this new capacity is a 60,000 ton expansion of Anaconda's smelter in Sebree, Kentucky. In the 1980-82 period, the only U. S. producer with plans for major expansion is Alumax, which has announced plans to add 253,000 tons of new primary capacity including the only new domestic reduction plant currently contemplated (see table).

While average long-term growth in demand has been projected at approximately 5 percent per annum, producers have been reluctant to overcommit themselves to expansion. This stems in part from the belief that an average growth rate can encompass several peaks and troughs. When a demand trough coincides with substantial increases in capacity, as in the early seventies, lower product prices and profits result. Other factors include the escalating costs of new capacity, stiff environmental regulations, finance charges, and substantial electricity requirements.

Looking at free world aluminum capacity, only modest expansion (less than 3.0 percent per annum) is planned through 1982. In addition, Japanese aluminum companies, which are the second largest primary producers in the free world, are currently operating at only 75 percent of capacity and are negotiating with the government to shut down 25 percent of capacity permanently. Thus, we would expect that supply and demand should remain approximately in balance over the short term, with supply becoming tight in the early 1980's.

U. S. PRIMARY CAPACITY
in Thousand Short Tons

(as of December 31)

Company	1974	1975	1976	1977	1978E	1979E	1980E
Alcoa	1,575	1,575	1,675	1,675	1,675	1,700	1,700
Reynolds	975	975	975	975	975	975	975
Kaiser	724	724	724	724	724	724	724
Sub-total	3,274	3,274	3,374	3,374	3,374	3,399	3,399
Concalco	342	352	352	352	352	352	352
Anaconda	300	300	300	300	300	360	360
Howmet	217	217	219	219	219	219	219
Martin Marietta	205	210	210	210	210	210	210
Revere	197	199	199	200	200	200	200
Alumax	130	219	219	219	219	219	309
Southwire	90	90	90	90	90	90	90
National Aluminum	90	90	90	90	90	90	90
Noranda	70	70	140	140	140	140	140
Sub-total	1,641	1,747	1,819	1,820	1,820	1,880	1,970
TOTAL	4,915	5,021	5,193	5,194	5,194	5,279	5,369
Change from Preceding Year-end	+0.5%	+2.2%	+3.4%	0%	0%	+1.6%	+1.7%

Source: Aluminum Association

In 1977, the industry operated at approximately 87 percent of capacity. Operating rates would most likely have been up to 7 percent higher were it not for a 25 percent cutback in hydroelectric power by the Bonneville Power Administration in mid February caused by severe drought conditions in the Pacific Northwest. Heavy rains and snowfall in the area late in 1977 have eased the drought, power cutbacks have been lifted, and the major producers have announced plans to reopen potlines. The remaining idle capacity is in plants powered by natural gas, where supply limitations and high costs have forced closings. Given limited capacity expansion and the end of the drought in the Pacific Northwest, capacity utilization rates should rise above 90 percent in 1978 and remain in the 95 percent plus range through 1980.

Production

Primary aluminum production in 1977 totaled 9,077 million pounds, an increase of 6.8 percent over the 8,503 million pounds produced in 1976, and the second highest production level on record. The average annual growth of production since 1893 has been 13.6 percent, but in the last decade the growth rate has averaged 3.3 percent. Based on an operating rate above 90 percent and a 4 to 5 percent increase in domestic shipments, an 8 percent increase in domestic production is expected in 1978.

In 1977, primary production amounted to 70 percent of the total domestic aluminum supply. The remainder consisted of 24 percent from secondary recovery and 6 percent from net imports.

Since additions to the U. S. primary capacity since 1971 have been relatively minor, the use of secondary scrap and recycled metal has been increasingly important as a supply source, particularly in the die-casting business.

In fact, secondary recovery has risen from 21 percent of total supply in 1971 to an estimated 24 percent of supply in 1977. Given rapidly rising energy costs, secondary recovery will continue to play an important role in the supply picture--it takes only 5 percent of the energy needed to make virgin metal from bauxite to convert scrap aluminum back to ingot form. In 1976, 2.9 million pounds of scrap was recovered, including 832 million pounds (29 percent) recovered from old scrap. In the past ten years old scrap recovered has grown at an 8.3 percent average annual rate, aided in large part by the growth in recycled aluminum cans from 1.2 billion cans in 1972 to 4.8 billion cans in 1976 (41 percent annual growth rate). Over 2,000 collection centers are now in operation, redeeming aluminum cans for 17 cents per pound, and reclaimed cans will provide an increasingly important portion of primary aluminum supply.

Government stockpiles, undertaken to provide for orderly disposal of surplus aluminum, have been an important source of supply in the past. In 1973, 11 percent of total domestic shipments were drawn from the stockpile. However, by the end of 1976, more than 4 million pounds had been purchased from the stockpile, and it is now essentially depleted.

Imports are the remaining source of aluminum. The U. S. has long been a net importer of aluminum; and in 1977, net imports totaled 781 million pounds. In order to meet anticipated demand over the next five years, imports must continue to rise, perhaps by as much as 30 percent by 1980.

Costs

The major cost components in aluminum production are bauxite, alumina, labor, electricity, and freight. It takes roughly four pounds of bauxite to produce two pounds of alumina (aluminum oxide) from which one pound of aluminum

is derived through the reduction process at a smelter. Large quantities of labor and energy are needed in the reduction process--approximately 16,000 kilowatts and 12 to 30 man-hours per ton. Depending on the location of primary smelters, varying freight costs are incurred in bringing alumina in and shipping final products to fabrication plants or to market. All of these costs have been rising and, in our present economic environment, are likely to continue to increase through the foreseeable future.

Currently the United States accounts for less than 3 percent of world bauxite production. Consequently, there is extreme dependence on other nations for raw materials. Although U. S. bauxite reserves of 40 million long tons are substantial, mining of bauxite deposits in this country is uneconomical for commercial use. Experimental projects are under way to develop new processes for producing alumina from domestic sources; however, it will be many years, if ever, before any commercially viable applications are available.

Thus, the U. S. aluminum producers will continue to depend on foreign raw materials. Total bauxite consumption in 1976 was 12.9 million long dry tons, of which 84 percent was imported from Jamaica, Guinea, and Surinam. In March of 1974, the International Bauxite Association (IBA) was formed by thirteen countries, representing 73 percent of world bauxite production, to promote the interests of bauxite-producing nations. At that time Caribbean members were given the leverage to raise their bauxite taxes enough to increase the delivered price 150 percent. Since that time, bauxite prices have increased by almost three times. As a result, bauxite imports from Jamaica and Surinam have declined since 1974, while imports from Guinea (which has disassociated itself from the "cartel") have increased. Nevertheless, Jamaica remains the major supplier of bauxite to the U. S.

The IBA has recently agreed on a floor price of $24.39 per long ton for base (Jamaican) grade bauxite landed in the United States, a level almost 20 percent below current prices. Meanwhile the Jamaican government and the major U. S. aluminum companies have signed agreements whereby Jamaica will buy back all mining and nonoperating land as well as purchasing a percentage of the mining assets of each company. In exchange, the companies were granted forty-year mining leases for current production levels and a constant (lower) bauxite levy for the next eight years. Although Jamaica has tried to establish itself as the leader of the Third World bauxite producing nations, bauxite is available from other sources (Australia, Brazil, etc.), and it now appears that, in the light of dwindling cash and reserves, Jamaica will try to stabilize its bauxite revenues rather than risk losing revenues if prices are raised further.

In recent years there has been an increasing amount of production integration by the bauxite mining countries. Consequently, alumina imports have risen 43 percent since 1972, while bauxite imports have risen only 3 percent. The major alumina exporter is Australia (68 percent), with Jamaica and Surinam also exporting sizeable amounts of alumina to the U. S. Since the cost of alumina is directly dependent on the cost of bauxite, the recent agreement with the Jamaican government would imply more stable prices over the next eight years. (Of course, since the bauxite levy is a percentage of the ingot price, if firms raise ingot prices, bauxite levies would rise proportionately.)

The aluminum industry negotiated a new three-year contract which became effective in May, 1977. Among the provisions are:

1. 80 cents per hour wage increases spread over three years:

   50 cents in 1977
   20 cents in 1978
   10 cents in 1979

2. A cost of living increase of 1 cent per hour for each 0.3 percent increase in the Consumer Price Index.
3. Expanded fringe benefits for sickness and accident benefits and insurance coverage.
4. Improved supplemental unemployment benefits for laid-off workers.
5. Income maintenance provisions for workers assigned to lower-rated jobs.
6. A rule of "65" pension for those employees having twenty years of service affected by plant shutdowns and extended layoffs.
7. Pension rate increases, but the cost of living escalator for pensions was not continued.

The settlement is estimated to result in a cumulative increase of approximately 4 to 5 cents per pound of fabricated and ingot aluminum over the three-year period.

The cost of electricity is of major concern to the industry, representing approximately 13 percent of total cost. Currently electricity costs vary from 3.2 mills per kilowatt hour in the Pacific Northwest to 15 mills per KWH in the Tennessee Valley Authority area to 25 to 30 mills for Texas intrastate natural gas. For 1977, average power costs have been estimated at an average of 8 to 9 mills per KWH. Broken down by type of power, approximately 50 percent of the U. S. primary aluminum capacity is powered by coal, 38 percent by hydroelectric power, and 12 percent by natural gas. Slightly more than 50 percent of the North American aluminum industry's power is company generated, while 23 percent is purchased from the Bonneville Power Authority and 26 percent from other sources.

Among the major power suppliers to the aluminum industry, only the Bonneville Power Authority (BPA) is likely to increase electricity prices dramatically

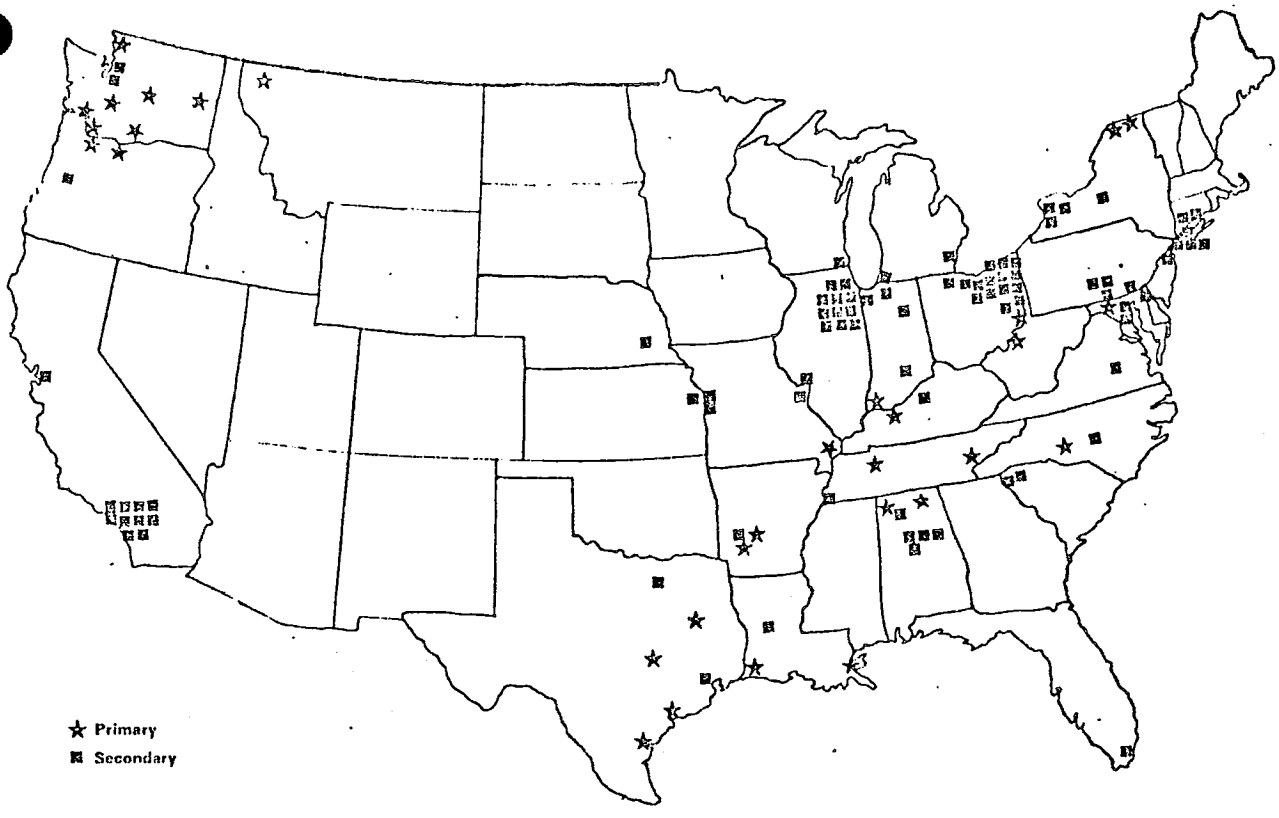
in the near term. It appears that BPA power will remain in the 3 to 4 mills per KWH range until 1980, when the BPA rate is expected to rise to 10 mills. Other power cost increases are projected to keep pace with inflation.

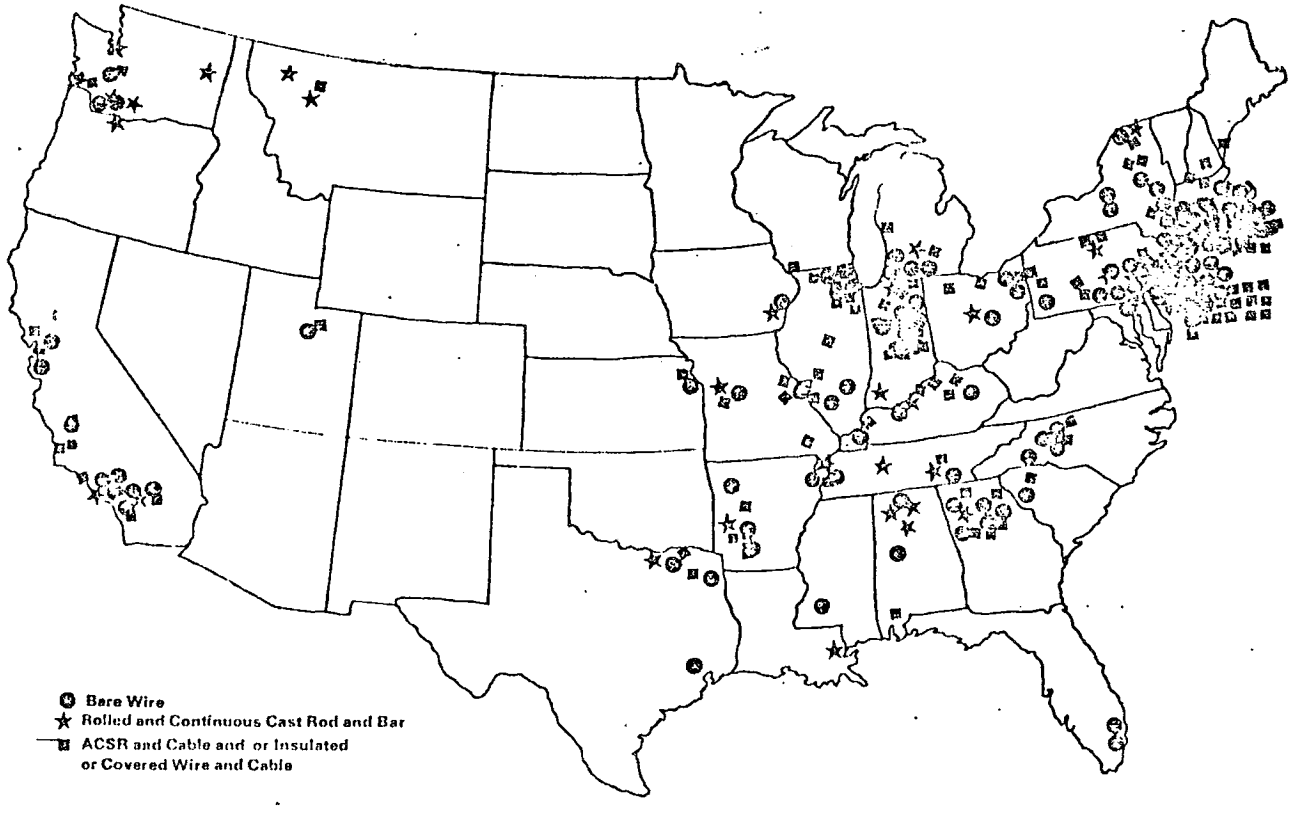
Although the hydroelectric power supplied by BPA is the least expensive source of electricity for the aluminum industry, high transportation costs generally offset this cost advantage. As can be seen on the following maps, while 30 percent of the industry's primary capacity is located in the Pacific Northwest, fabricating plants are concentrated in the East, Midwest, and Southern California (close to the major markets). Thus, considerable freight charges are incurred in shipping ingot from the Northwest to fabricating plants. Consequently, it appears that despite considerable differentials in energy costs, primary producers' total costs are relatively competitive in all areas of the U. S. (with the possible exception of two reduction plants in Texas which can operate only on intrastate natural gas).

Pricing

The current list price of aluminum ingot is 53 cents per pound. Two price increases were instituted in 1977--in March the price was raised from 48 cents per pound to 51 cents per pound, and in July another 2 cent per pound increase was announced. Although shipments in the second half of 1977 were lower than first half shipments, the 53 cent price appears to be "sticking," and there is a minimal amount of discounting in the industry at the present time.

In the future, aluminum prices may rise as imports increase their market share. In the U. S. the cost of electricity to smelt one pound of aluminum is roughly 7.5 cents versus 13 cents in Europe and 24 cents in Japan. Conse-





quently, higher production costs abroad may lead to premium prices for imported aluminum as supply tightens. This would give U. S. producers the leverage necessary to boost prices and widen profit margins.

Future Outlook

Demand is projected to increase 4 to 5 percent in 1978 and thereafter at a 5 to 6 percent average annual rate. Given the fact that there is little expansion of primary capacity planned at this time, it appears that the supply will continue to tighten relative to demand, thus forcing prices up. As noted earlier, the U. S. industry currently enjoys a cost advantage based on lower electricity prices, and this advantage is expected to continue into the future. However, as imports comprise an increasing proportion of total domestic supply, prices will be forced upwards, allowing improved short-run returns to domestic producers.

Energy continues to be of major concern to the aluminum industry. Under a voluntary industrial energy conservation program established by the U. S. Department of Commerce and the Federal Energy Administration, the primary aluminum industry pledged to reduce its consumption of energy by 10 percent for the period 1972-80. By mid 1977, industry sources indicated that 85 percent of the goal had been attained due to better technology and new work practices.

Looking at the longer term outlook, the existing primary capacity is old and will become obsolescent due to technological improvements. In June of 1976, Alcoa began operations at a 15,000 ton pilot plant in Texas, using a new smelting process which reduces the electricity required for smelting to 4.5 KWH per pound (a 30 percent reduction), and a second plant of similar

size is under construction. This new smelting process is the first new method for producing aluminum since the Hall process was introduced ninety years ago. The Alcoa process is a chemical process combining alumina with chlorine and converting the resulting oxide to aluminum chloride. This compound is then electrically treated, separating it into molten aluminum and chlorine. Alcoa has claimed savings on both electrical and labor costs using this process. The industry's existing Hall-type smelters cannot be converted to use the Alcoa process; and if Alcoa's operations in Texas prove the new process to be superior, existing smelters will operate at a cost disadvantage.

Research continues on new smelting technologies. In September of 1977, Alcoa and the Energy Research and Development Administration announced plans to participate in a jointly funded program to develop a smelting process using coal rather than electricity as an energy source. A pilot unit will be constructed, utilizing a direct reduction process similar to the blast furnaces used by the iron and steel industry. Such a process could use lower grade aluminum ores available in the U. S. and thus lessen dependence on imported raw materials. While implementation of any new smelter technology would take many years and a significant capital investment, it seems safe to assume that, as supply tightens and prices rise, new capacity using more efficient technology will be installed.

Assumptions

The current outlook for the aluminum industry is favorable. However, assumptions have been made about the industry and the economy, and significant deviations from these assumptions could materially change this forecast.

First, we assume continued growth of the U. S. economy. While the industry might be able to weather a short growth recession, a severe downturn of the business cycle would negatively impact the aluminum industry. In the seventeen years since 1960, real gross national product has risen in fourteen of those years. In all but one instance aluminum shipments rose, and in fact, in ten instances aluminum shipments rose at least twice as much as real GNP. Thus, the industry is extremely dependent on national economic trends; and if a recession occurs, an oversupply of aluminum would most likely develop.

Second, we assume that the United States will retain its cost advantage vis-a-vis foreign producers. The only risk to this assumption would be a significant upward revaluation of the dollar, which appears extremely unlikely at this time.

Third, we assume that the industry will not face price elasticity problems. With rising prices, aluminum could lose its competitive position with steel, copper, and plastics, particularly in the automobile industry.

Fourth, we assume that, although supply will tighten, severe shortages of the metal should not develop. An extreme shortage could make the price uneconomical and preclude future growth. It appears that over the next five years increased imports and more emphasis on recycling should prevent shortfalls; and as prices rise, additions to primary capacity will become profitable.

Last, we assume that adequate electricity for smelting will be available. Since the aluminum industry has large electricity requirements, any major power shortages caused by drought or strikes could impair growth.

Northwest Industry Comments

At the present time it appears that primary producers' total costs are competitive in all areas of the U. S. Specifically, although the aluminum industry in the Pacific Northwest enjoys the lowest electricity cost in the nation due to its long-term contracts with the Bonneville Power Administration, the cost of shipping ingot longer distances for fabrication has offset this advantage. Furthermore, looking at the future, it appears that, with time, the aluminum industry will face higher costs in the Northwest than in other areas of the country.

The aluminum industry in the Northwest dates back to 1940, when Alcoa opened a plant at Vancouver, Washington. Reynolds and Kaiser established plants in the area in the 1940's, and by 1947 the Northwest accounted for 47 percent of total capacity. Industry was drawn to the region by the hydroelectric power generated by the Bonneville Power Admini ration and sold directly by BPA to the aluminum companies. Although one fourth of the power BPA sells to the industry is interruptible, that is, it can be cut back during periods of drought, BPA power is two to five times less expensive than industrial electricity rates elsewhere.

At the present time 31 percent of primary aluminum capacity is located in the Northwest. Being a high fixed cost industry which enjoys economies of scale, the aluminum industry needs to operate at 90 percent of capacity or better. However, during 1977 approximately 25 percent of Northwest capacity was shut down due to severe drought conditions. Inexpensive, but unavailable, power is useless, and idle capacity cuts into producers' profits.

Heavy snow and rains have ended the drought, and potlines are being brought back on-stream, but a more pressing problem is now facing the alumi-

num industry in the Northwest. Bonneville Power has notified the industry that, as long-term contracts begin to expire in 1981, they will not be renewed. BPA has stated that it will not have sufficient power to serve both industry and municipalities; and under the legislation which created BPA, public agencies have first call on federal power. The entire issue of whom should get Bonneville's power and at what price is now being debated.

A compromise plan (the Pacific Northwest Electric Power Supply and Conservation Act) has been proposed. This bill, which requires Congressional approval, would provide for a reallocation of low-cost hydroelectric power among all users, with priority customers receiving the benefit of existing hydroelectric power and industrial customers receiving a blend of hydroelectric and thermal power. This plan would assure producers of an adequate energy supply; however, the cost could climb from the present 3 mills per KWH to 10 mills in 1980 and to 30 mills in 1990.

Regardless of the final format of this legislation, power costs in the Northwest will increase; and as they do, Northwest producers will be operating at an increasing cost disadvantage. In addition, the smelters in this region are among the oldest and least efficient in the U. S., thus further raising operating costs and shifting production advantages to other areas.

Given rising costs and aging plants, it seems unlikely that the Northwest will be the site of any major expansion by the aluminum industry (Alumax hopes to build a $400 million reduction plant with Mitsui in eastern Oregon; however, environmental and energy questions have delayed approval four times, and it is uncertain when, if ever, construction might begin). This fact will lead to lower resale value of existing plants in the area. In addition, the aluminum smelting process is unique; plants and equipment would have no value to other

manufacturers, thus lowering the overall value of existing smelters. In conclusion, new technology, higher electricity costs, and increasing freight costs all contribute to the Pacific Northwest's being an undesirable region in which to build or expand primary aluminum capacity, and thereby significantly reduce the present value of any plants already existing in the area.

COMPARATIVE GROWTH TRENDS

Year	Copper Consumption (000 tons)	FRB Index of Ind. Activity (1967 = 100)	Steel Ingot Production (million tons)	Aluminum Shipments to Consumers (million tons)
1946	1135	35.0	66.60	0.82
1947	1463	39.4	84.89	1.00
1948	1421	41.0	88.64	1.11
1949	1130	38.8	77.98	0.80
1950	1424	44.9	96.84	1.18
1951	1386	48.7	105.20	1.21
1952	1401	50.6	93.17	1.35
1953	1446	54.8	111.61	1.64
1954	1276	51.9	88.31	1.51
1955	1537	58.5	117.04	2.02
1956	1555	61.1	115.22	2.08
1957	1366	61.9	112.71	1.94
1958	1277	57.9	85.25	1.82
1959	1487	64.8	93.45	2.53
1960	1374	66.2	99.28	2.37
1961	1486	66.7	98.01	2.49
1962	1609	72.2	98.33	2.89
1963	1753	76.5	109.26	3.19
1964	1864	81.7	127.08	3.59
1965	2035	89.8	131.46	4.08
1966	2379	97.7	134.10	4.52
1967	1982	100.0	127.21	4.47
1968	1878	106.3	131.46	4.99
1969	2142	111.1	141.26	5.41
1970	2042	107.8	131.51	5.06
1971	2016	109.6	120.44	5.21
1972	2231	119.7	133.24	6.02
1973	2444	129.8	150.80	7.22
1974	2201	129.3	145.72	6.80
1975	1536	117.8	116.78	4.96
1976	1966	129.8	128.21	6.38
1977	2200	137.1	124.70	6.67
Average Annual Growth Rate	3.2%	6.7%	3.0%	10.5%

Source: Survey of Current Business
U. S. Department of Commerce

SOURCES

Adams, Walter	The Structure of American Industry (Macmillan, New York, 1961)
The Aluminum Association	Aluminum Statistical Review 1976, The Story of Aluminum
Major Aluminum Companies	Annual Reports to Stockholders - 1977
Various Brokerage Houses	Industry Surveys and Reports
U. S. Department of Commerce	U. S. Industrial Outlook 1978

Various issues of the following periodicals:

- Barron's
- Business Week
- Chemical and Engineering News
- Forbes
- Industry Week
- Iron Age
- The Wall Street Journal

QUALIFICATIONS OF APPRAISER

PAUL D. ROBERTS, C.T.A. Senior Vice President

EDUCATIONAL BACKGROUND

Fairleigh Dickinson University
Bachelor of Science Degree in Accounting
Graduated Magna Cum Laude

American Institute of Real Estate Appraisers
Basic Principles, Methods and Techniques (1-A)
Middlesex College, New Jersey
Capitalization Theory and Techniques (1-B)
Middlesex College, New Jersey

International Association of Assessing Officers
Cost Approach to Value - Programmed Course
Income Approach to Value - Programmed Course

PROFESSIONAL AFFILIATIONS - LICENSES

New Jersey Certified Tax Assessor

International Association of Assessing Officers, Subscribing Member

Canadian Property Tax Agents Association, Incorporated

Northeast Regional Association of Assessing Officers

Institute of Property Taxation

EXPERIENCE

Presently employed as Senior Vice President for International Appraisal Company, Incorporated.

QUALIFICATIONS OF APPRAISER (Continued)

PAUL D. ROBERTS, C.T.A.

EXPERIENCE (Continued)

For the past seven years, engaged in the appraisal of residential, commercial, and industrial real estate.

Has appraised homes, vacant land, garden and high-rise apartments, office buildings, commercial buildings, industrial parks, manufacturing plants and warehouses, and shopping centers. Has also appraised personal property (machinery and equipment, furniture and fixtures) and leasehold interests.

Has testified as an expert before various County or City Boards in: California, Connecticut, District of Columbia, Georgia, Iowa, Kentucky, Maryland, Michigan, Mississippi, Missouri, New Hampshire, New Jersey, Ohio, Pennsylvania and Tennessee and before the former Michigan State Tax Commission.

Has lectured on appraisal topics before various associations.

QUALIFICATIONS OF APPRAISER

RICHARD A. KULMAN, I.F.A.S., C.R.A.

Senior Appraiser

EDUCATIONAL BACKGROUND

B. A., Hunter College, City University of New York

M.B.A., (Real Estate) Baruch College, City University of New York

American Institute of Real Estate Appraisers
- Course I - Appraisal Theory and Practice
- Course II - Urban Properties
- Course VI - Investment Analysis

School of Mortgage Banking, Mortgage Bankers Association
- Course I

New York University (Real Estate Institute)
- Construction Lending

Pace College, New York
- Real Estate Certificate

National Association of Independent Fee Appraisers
- Instructors Certification Course

PROFESSIONAL AFFILIATIONS

National Association of Independent Fee Appraisers, Senior Member, I.F.A.S.

National Association of Review Appraisers, Senior Member, C.R.A.

New York State Society of Real Estate Appraisers

The Real Estate Board of New York

American Society of Appraisers (Associate Member)

American Institute of Real Estate Appraisers (Candidate)

Licensed Real Estate Broker, State of New York

QUALIFICATIONS OF APPRAISER (Continued)

RICHARD A. KULMAN, I.F.A.S., C.R.A.

FACULTY POSITION

Adjunct Lecturer, Real Estate; Baruch College, City University of New York, (1972-Present)

Instructor for all undergraduate courses in elementary and advanced real valuation and appraisal. Have also taught courses in real estate finance and principles of real estate.

EXPERIENCE

Presently engaged as Senior Appraiser of International Appraisal Company, Incorporated.

Began real estate career with the Metropolitan Life Insurance Company in 1962 and became active as an appraiser of income properties in 1967. Joined Sonnenblick - Goldman Advisory Corporation, in 1971, and as Assistant Vice President and Senior Appraiser was in charge of the Appraisal Department. Associated with the National Bank of North America as Vice President in early 1975. Formed own real estate appraisal and consulting firm in mid 1975, and prepared appraisals and market studies for various institutional lenders, private investors, relocation companies, attorneys and other appraisers. Have also acted as a valuation consultant in connection with a major bank's REIT asset swap program.

QUALIFICATIONS OF APPRAISER (Continued)

RICHARD A. KULMAN, I.F.A.S., C.R.A.

EXPERIENCE (Continued)

Professional experience includes appraisals on various types of properties, including garden, mid- and high-rise apartments, condominium developments, office buildings, shopping centers, industrial buildings, taxpayers, single family dwellings and vacant land along with such specialty properties as parking garages, hospitals, nursing homes, motels, hotels, tennis courts, etc.

Qualified and testified as a real estate expert before various Tax Appeal Boards in New Jersey and Massachusetts.

QUALIFICATIONS OF APPRAISER

JOSEPH P. RICH
SENIOR APPRAISER

EDUCATIONAL BACKGROUND

Herkimer County Community College; Herkimer, New York
Social Science - 1969

Computer Business Machine School; Utica, New York
Graduated - 1970

Society of Real Estate Appraisers
Courses - 101 - Appraisal Methods and Techniques
201 - Appraisal of Income Properties and Investment Analysis

University of Connecticut
Real Estate Principals and Practices
Appraisal I

Have attended various A.I.R.E.A. and S.R.E.A. seminars and conferences.

EXPERIENCE

Presently engaged as a Senior Real Estate Appraiser for International Appraisal Company.

Began real estate career with the J. M. Cleminshaw Company in 1970. This association covered a span of two years. During this period worked under regional supervisor, during the latter half as a job supervisor and assisted in setting up revaluation programs for various communities. Appraised real property for tax purposes.

QUALIFICATIONS OF APPRAISER (Continued)

JOSEPH P. RICH
SENIOR APPRAISER

EXPERIENCE (Continued)

Formerly a Senior Appraiser for the John F. Rowlson Company, a real estate appraisal and consulting firm located in central Connecticut.

Experience in the appraisal of residential, commercial and industrial properties along with specialty-type properties, such as sand and gravel pits, stone quarries, recreational campgrounds, mobile home parks, planned unit developments, condominiums, condominium office buildings, medical office buildings and nursing homes.

Have performed numerous feasibility, marketability and highest and best use studies. Have also performed cash flow analysis on various types of income-producing properties, business valuations and the appraisal use of regression analysis.

Qualified and testified as a real estate expert before various local courts and tax appeal boards in Connecticut.

PARTIAL LIST OF CLIENTS

Banks and Leasing Companies

Industrial National Bank of Rhode Island, New Jersey Bank, DPF, Inleasing, Leasco, Stratford Leasing, Terryphone

Chemicals and Pharmaceuticals

Becton-Dickinson, Bristol-Meyers, BP Oil, Ciba Geigy, Colgate-Palmclive, E.I. DuPont DeNemours, Johnson & Johnson, Lever Brothers, Olin, Pharmacia, PPG, Helena Rubinstein, E.R. Squibb & Sons, Sun Chemical, Valspar

Consumer Goods - Apparel, Shoes, Etc.

American Home Products, Adorence, Aurora, Drug Guild, Electrolux, Genesco, Kinney Shoes, Miller Wohl, Morton Shoes, National Shoes, Panasonic, Pierre Cardin, SCOA, Stride-Rite, Tucker Knits, Wilroy, Vera, Yves St. Laurent

Food

American Bakeries, Borden, Continental Baking, Falstaff, General Host, Goya, H.J. Heinz, Hills Brothers, Nabisco, Oscar Mayer, Schaefer, Joseph E. Seagram, Van Munchin

Hotel/Motel, Restaurants

Del Webb, Dutch Inns, Holiday Inns, Howard Johnson's, International House of Pancakes, Marriott, Ramada Inns, Royal Inns, Sheraton, Traveloge

PARTIAL LIST OF CLIENTS (Continued)

Manufacturers, Conglomerates

Addressograph-Multigraph, Amerace Esna, American Standard, AMF, Bausch & Lomb, Bendix, Boeing, Boise Cascade, Burroughs, Cargil, CBS, Coats & Clark, Crane, Delaval, Facet, Federal Paper Board, General Cable, Globe Union, B.F. Goodrich, Greenville Tube, Gulf+Western, Harnischfeger, Houdaille, Inmont, International Telephone & Telegraph, Jim Walter, Joy, Kaiser Gypsum, Keene, Litton, Marquette, NCR, Owens-Illinois, Pitney Bowes, Richardson-Merrill, Teledyne, 3M, Transamerica, Walter Kidde, Westvaco, Weyerhaeuser, U.S. Industries, VWR United, Xerox

Metals

ALCAN, ALCOA, ALUMAX, Anaconda, Jones & Laughlin Steel, Latrope Steel, Reynolds Metals, Wheeling-Pittsburgh Steel

Real Estate Investment

Arlen, Cardston, Delco Development, M. Fluss, Goodrich, Gould, Hartz Mt. Industries, Harv Real, Harvrich, Investment Corporation of America, Kimco, MaceRich, Philadelphia Mortgage Trust, Prudent Real Estate Trust, Resnick & Sons, United National, U.S.I.F.

Retail

A&P, Benner Tea, Borman's, Cook United, David Shops, Daylin, Edison Brothers, Finast, Gaylords National, Grand Union, Jubilee Shops, Korvette's, S.S. Kresge, Kress, Lane Bryant, Lerner Shops, Levitz Furniture, Lyle Stewart, May Company, Montgomery Ward, Neisner Brothers, J.C. Penney, Petrie Stores, Stop & Shop, Supermarkets General, Woodward & Lothrop, F.W. Woolworth, Zayre's